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Cover image:
Close Helmet with Grotesque Face (Shembartlaufen Visor) from Nuremberg, Germany, c. 1500. Made with painted steel and in the form of a grimacing human. Used in Schembartlaufen, or medieval Shrovetide parades.
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Chronika, Volume VI
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Letter from the Editor

We are very proud of this edition of Chronika, our sixth volume. It has been a lot of work to strive for the standards set for us by the previous volumes, but it has been entirely worth it in order to have been able to accept, read, edit, and publish outstanding graduate student work from around the world. Many thanks are due to the authors, associate editors, reviewers, and IEMA itself for helping Chronika continue to be a success. We have included several IEMA grant project reports in this volume and I want to especially thank IEMA—and the rest of our generous cosponsors—for continuing to help fund graduate student research and publications.

Peer-reviewed graduate journals like this are invaluable resources for graduate students to share their research and ideas, as well as to hone their writing and editing skills. The articles this year come from students from respected university institutions in the United States, Austria, Belgium, England, and Greece. As the third editor-in-chief, I also want to thank Darren Poltorak and Laura Harrison, our former editors, for their invaluable advice and help for this year and volume. I look forward to working on the next installment in 2017 as well and to fostering continued improvements in our reach as a publication and as an editing team.

Britta Spaulding
Editor in Chief

Space and Identity in Roman Moesia: Rethinking Military and Civilian Spheres in a Frontier Province

Lina Diers

Defining military and civilian spheres in the Roman province of Moesia is no easy task. Although the province's numerous military structures along the Danube Limes (fortified but permeable frontier) and in its inland are well-known, there is certainly some confusion when it comes to the embedment of these structures within Moesia's settlement patterns and particularly their civilian factor. On one hand, epigraphic evidence attests to the common frontier province phenomenon of so-called settlement dualism of canabae (settlement structure featuring soldiers' families and supply units alongside legionary camps and auxiliary forts) and vici (village/civilian settlement structure ranging between urban and rural character) in all the major legionary camp sites of Moesia. On the other, the state of archaeological research in Moesia does not (or not yet) allow a distinct location or spatial separation of canabae and vici at most sites. Instead, the site conditions rather display surprising degrees of mixing military and civilian administration and living spheres contradicting the concept of settlement dualism. By introducing several examples for this situation, this article discusses if it is useful or even necessary in current modes of post-processual, post/-anti-colonial and identity-oriented discourse in Roman Archaeology to spatially divide military and civilian spheres in clarifying everyday life reality and settlement patterns in Roman Moesia.

Introduction

The Roman province of Moesia was founded in the period between 15 and 45 C.E. and separated into Moesia Superior and Inferior in 86 C.E. It belonged to the Danube provinces and frontier zones of the Roman Empire. Due to the continuous presence of Roman military throughout the province's whole history that goes along with this geographical location within the Empire's borders, Moesia has often been considered as a military province. It is believed that the focus within the province clearly lay on the fortification of the Danube *Limes* and the economic exploitation of the province's interior, making the label of a military province predominantly tied to the Roman army as a dominant factor within Moesia's population and social development. Thus, the military history of the Middle and Lower Danube *Limes* is an elaborately researched area. While the legionary deployments and their consequences at the very beginning of Roman presence in the Balkans are still insufficiently known, the picture becomes clearer from the middle of the first century C.E. on. Until the separation into Moesia Superior and Inferior, the province had three legions, garrisoned in Viminacium, Oescus and Novae.[1] After 86 C.E., Moesia Superior was protected by two legions in Singidunum and Viminacium, while Moesia Inferior even had three – at least until the Marcomannic wars (during Marcus Aurelius' reign 166-180 C.E.) – stationed in Novae, Durostorum and Troesmis.[2] In addition to these permanent legionary garrisons, an extraordinarily dense occupation of auxiliary forts and watchtower sites can be found both at the Danube *Limes* and in the province's interior.[3] These were mostly attached to the major road connections linking the

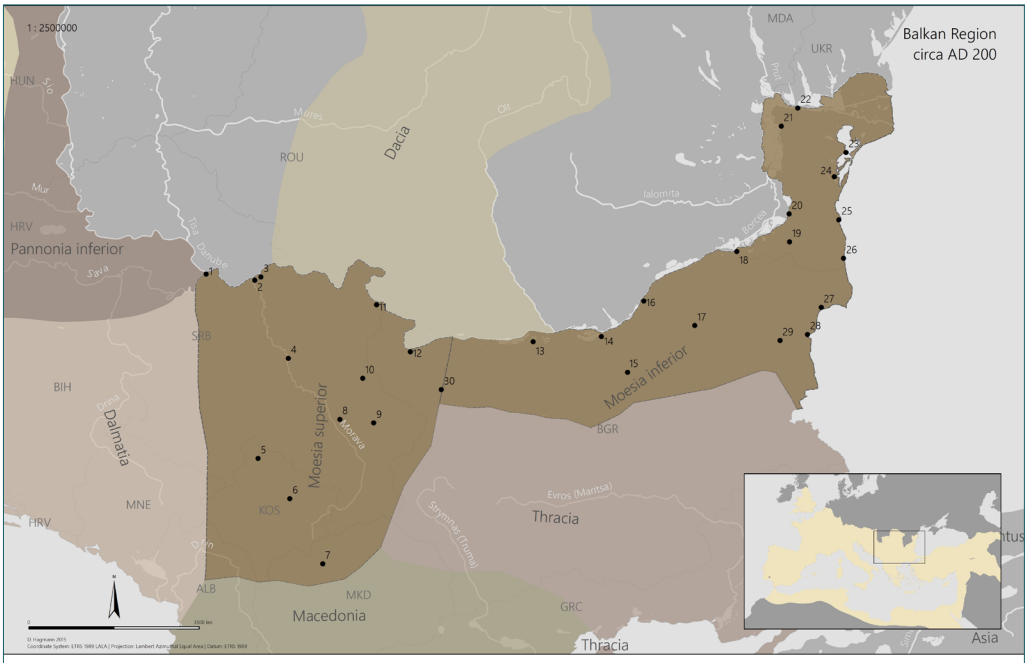

Figure 1: Indication of 30 possibly urban sites within the research area of Moesia Superior and Inferior. © D. Hagmann/L. Diers, 2014.

Danube with the Adriatic and the Eastern Empire or associated with the numerous mining districts mostly in Moesia Superior (Fig. 1).[4]

In contrast to the military history, the urban development and characteristics of Moesia cannot be traced back that easily. While larger military institutions like legionary or auxiliary camps are rather easily detectable with the help of fortifications, towers, gates and inner structures of headquarters buildings or barracks, the identification of related settlement structures as military or civilian as well as of settlements without military presence as urban or rural is more complicated. Firstly, most Roman settlements in Moesia have been massively overbuilt or destroyed in late antique and medieval and/or modern times.[5] Secondly, criteria for assigning settlement structures an urban (in contrast to rural) or civilian (in contrast to military) character are not clear at all. Applying general factors of settlement classification in the Roman Empire (administrative status, size, monumentality, strategic and economic importance) to Moesia's urban sphere includes 30 settlements, which might be referred to as a 'city': Apart from four deductive colonies,[6] 11 attested municipia[7] and the pontic Pentapolis,[8] there are still 10 sites with no attested status that either show supposed urban building activity or inscriptions providing evidence for an independent administration in Roman times.[9] Apart from this general problem, we also come across the typical frontier province phenomenon of so-called settlement dualism, meaning a contemporary existence of two civilian settlements in the direct vicinity of a legionary camp. The *canabae* developed on military land around the camp while the *vici* lay just outside the military territory on public land.[10] Although there are exceptions around the Roman Empire[11] it is generally believed that municipal status was eventually given to the *vici*, thus turning them into settlements of larger scale (or to use this term: cities), while the *canabae* still existed alongside the camps to serve their various everyday life needs. This conception has been primarily deduced from ancient sources concerning the public lease system in the Empire. Accordingly, public lease and land use was not exclusively allowed on militarily used territory.[12] However, the evidence from Moesia cannot confirm this generalized concept of settlement dualism and settlement classification, as the following examples will unmistakeably show.[13]

Administrative Status and Spatial Patterns: Military and Civilian Spheres in Moesian Legionary and Urban Centres

Viminacium

Being the capital of Moesia Superior Viminacium lies at the Danube Limes in today's Serbia, approximately ninety kilometres from Belgrade and close to the modern village of Kostolac at the Mlava's estuary into the Danube. As one of the first safely attested permanent legionary garrisons in Moesia, the legio VII Claudia had its camp in Viminacium from 70 C.E. on until the end of the Principate.[14] Furthermore, Viminacium is attested as a municipium from Hadrianic times onward, while in the first half of the third century C.E. it was eventually granted colonial status.[15] Viminacium is one of the few Roman sites in the Balkans, which have not been directly overbuilt. Unfortunately, the site is today bordered both by a power plant and a coal mine – and thus massively threatened.[16] Many features of the settlement area around the legionary camp, which embraces an area of around 70 hectares,[17] have already been destroyed, limiting the scope of overall topographical studies. The inscriptions found in the territory of Viminacium as well as the first archaeological investigations in the late 19th and early 20th century attest to the existence of two civilian settlements around the legionary camp: one being

directly attached to the camp, the other lying in a distance of two kilometres on the left bank of the Mlava river.[18] The exact status of these settlements is not known so far, but the spatial layout leaves no doubt that the civilian structures around the military camp were the *canabae*. The area of the second settlement, a proposed *vicus*, is located in the part of the site occupied by the power plant structures. Thus, the only sources available to characterize its layout and hints on urbanity are the early investigations in the vicinity of Kostolac, which are not published in detail.[19] The archaeological features preserved and studied so far are parts of the legionary camp, an amphitheatre as well as baths within the supposed territory of the *canabae*, several urban villas just outside the city's scope and, best known, the necropolises.

However, these aspects cannot really contribute to the question of the civilian settlement spheres' spatial division. As long as the number of settlement structures on the territory of Viminacium and their status is not confirmed, there is no point in calling one of the settlements a city or attaching another to the non-urban military sphere. According to settlement dualism, it would seem most logical for the *canabae* to remain a militarily dominated settlement structure on military land, which is also indicated by inscriptions suggesting the existence of the *canabae* even in the Severan period.[20] This would mean that the municipal status was given to the other – yet unclear – civilian settlement in the vicinity of the camp. On the other hand, some aspects rather support the theory of the *canabae* being turned into a *municipium*. Of special interest is the location of the newly discovered amphitheatre of Viminacium, built at the north-eastern edge of the *canabae* settlement area, only some 50 meters away from the camp territory. Such a monumental building clearly suggests urban settlement character, as it provides hints on urban Roman lifestyle and urbanity as social practice. On the other hand, gladiatorial games in permanently garrisoned provinces are always specifically tied to the military sphere as well (Fig. 2a and 2b).[21]

Figures 2a and 2b: View over the settlement territory of Viminacium from the Amphitheatre, indicating both the power plant and the mining occupation. Photos by L. Diers, September 2014.

Lastly, the current situation in Viminacium concerning urbanity, municipalisation and settlement dualism could be interpreted in several ways. It is possible that municipal status was indeed given to the *canabae*, which would seem surprising in terms of the concept of settlement dualism and comparisons with other frontier provinces. Secondly, it is also possible

that the other, undefined settlement was granted municipal rights. This would follow the model of settlement dualism, but is not very likely due to the spatial layout of settlement structures. As long as there is no new evidence concerning the municipalisation of Viminacium (e.g. the identification of the civilian settlement as a *vicus*) I propose to define urbanity in Viminacium not spatially, but socially. The size of the *canabae* as well as the location of monumental buildings (amphitheatre, large baths) indicate that urbanism was not tied to administrative status and thus municipalisation but to social conceptions of urban lifestyle of both civilians and soldiers living in the camp and the nearby settlements of Viminacium. In spatial terms, the case of Viminacium suggests military and civilian spheres forming one large compound of settlement territory of urban scale. Therefore, Viminacium is a first vivid example for the implausibility of settlement dualism in Moesia as well as for the decreasing need to divide military and civilian spheres to define urbanity.

Novae

The site of Novae offers a similar, but more promising picture. Located on the Danube in Moesia Inferior, partly overbuilt by today's Svishtov, Bulgaria, Novae was home to the very first securely attested legionary deployment in Moesia, legio VIII Augusta in the period from 45 C.E. until 69 C.E.[22] After legio VIII Augusta left for the Rhine region, it was replaced by legio I Italica, which subsequently stayed in Novae until the end of the Principate.[23] Recent discoveries of coins and associated ceramic and building materials suggest that there was a hiatus of some years between the exchanging of legions in which Novae was left without a permanent garrison.[24] However, the legionary camp in Novae is one of the best-studied and preserved military structures in Moesia. Apart from different sections of the fortification system, the principia has been fully excavated and recently restored. In addition, there are two baths and the military hospital, an exceptional feature in the whole Balkan Peninsula. As for the urban development of Novae, the situation again tends to be less clear. There is only one inscription naming Novae as a municipium.[25] This inscription was found in the territory of the supposed city and can be dated to the beginning of the third century C.E. It has been suggested that Novae had already received municipal status under Emperor Marcus Aurelius;[26] yet, there is no concrete evidence for this assumption. The general topographical appearance of Novae again shows two civilian settlement structures in the wider area. The *canabae* stretch out to the west and south of the camp but are today mostly overlaid by modern farmland and the outskirts of Svishtov. Their preserved and researched features consist of a Mithraeum, various kilns, parts of the street layout, a peristyle villa and necropolises. While the whole area of the *canabae* covered 70 to 80 hectares,[27] the size of the second civilian settlement of Novae, the vicus of Ostrite Mogili three kilometres east from the legionary camp was only between 15 and 25 hectares.[28] Given the current state of excavations and research, the *vicus* seems to be a rather rural settlement. Furthermore, the *vicus* was most probably abandoned in the beginning of the fourth century C.E.[29] Due to the continuous threats of barbarian invasions during the third century C.E. the *vicus*' inhabitants' wish to move closer to the military camp is very understandable. If the *canabae* of Novae were granted municipal rights instead of the *vicus* at some point, this would have surely been a further motivation for them (Fig. 3).[30]

Thus, the overall situation at Novae as well as decisive factors of settlement size, layout and historical aspects make it more than probable that the *canabae* received municipal rights as the lawful city of Municipium Novensium.[31] Another aspect, which makes this assumption most logical, can be seen even in the name of

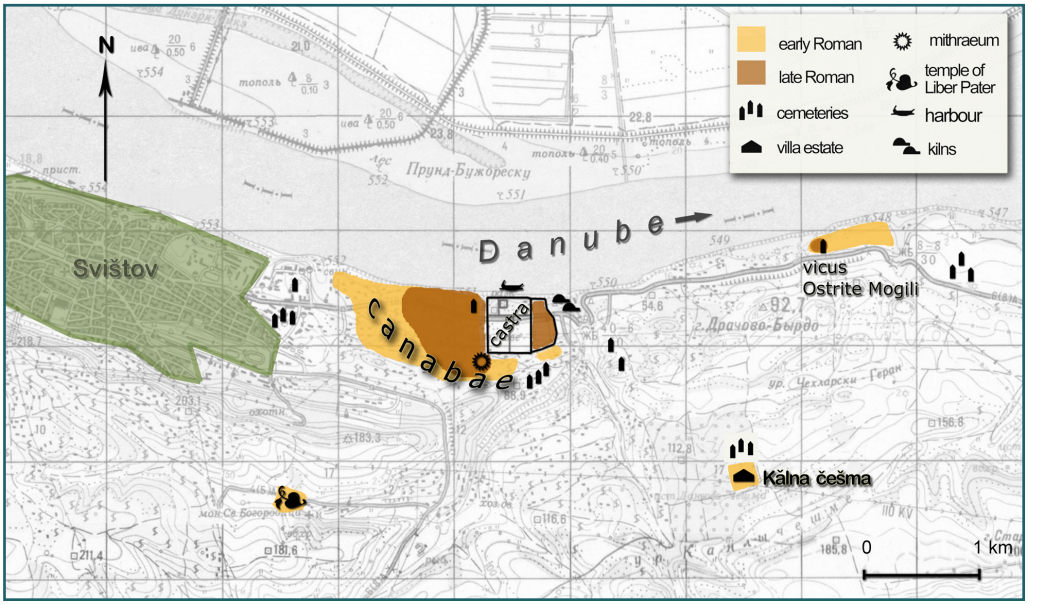

Figure 3: Topographical situation in Novae, showing modern Svishtov, the legionary camp, the canabae and the vicus in Ostrite Mogili. © Agnieszka Tomas, Warsaw.

the city. 'Novae' could very likely refer to the general character of the *canabae*: After the legio VIII Augusta left the Danube and the new legio I Italica probably only arrived at the site after a short hiatus, the term novae/Novae could be related to the renewal of the *canabae*.[32] However this may be, the most important question to be answered from future research in Novae is surely the unsolved matter of the municipal rights granting's dating. If the status of a *municipium* was given to the settlement already during the reign of Marcus Aurelius, both the development of an urban scale in the aftermath and the moving of the *vicus* inhabitants in the third and fourth century C.E. are very plausible and coherent. Still, the question would remain of why the *canabae* were intentionally chosen to be a *municipium* in such a case. If municipal status was given to Novae only at the beginning of the third century C.E., it would be of special interest to detect why the canabae indeed showed an urban layout in comparison to the *vicus* even before its municipal rights granting. This would be a first hint on the conditionality of urbanization and municipalisation in Roman Moesia. Therefore, the evidence from Novae as well as from the other legionary sites discussed here clearly suggests that municipalisation does not equal either urbanization or urbanity. Urbanization is not to be seen as the logical consequence of municipalisation. Moreover, municipalisation is no a priori criterion for turning civilian settlement structures into cities as civilian centres. On the contrary, it rather seems that – at least for the military centres around legionary camps that are discussed here – municipalisation is a consequence of urbanization processes. Civilian and military groups both bundle around legionary camps, thus turning them into centres of military and civilian importance, which eventually leads to concluding this process of urbanization even legally by granting municipal rights. These dynamic processes lastly also contradict a spatial

and theoretical separation of military and civilian spheres, impressively demonstrated with the help of evidence from Novae.

Durostorum

Durostorum displays another impressive example for the intermixture of settlement spheres in Moesian legionary camp sites and their consequences for urbanism. It is also located along the Danube *Limes*, in the southwestern part of Dobrudja underneath the modern town of Silistra, Bulgaria and the village of Ostrov, Romania. The development of the Roman settlement area began with the deployment of legio XI Claudia in Trajanic times, which caused the contemporary appearance of both *canabae* and *vicus*.[33] As the territory of the legionary camp and the *canabae* is totally overlaid by modern Silistra, a closer discussion of archaeological material (settlement layout, buildings, building phases, attached finds) is not easy. Still, various rescue excavations since the 1970s have provided enough information for recognising the general topographical layout of the area.[34] The camp of legio XI Claudia resided in the southwestern part of today's Silistra, while the *canabae* engaged the space in the north, northeast and northwest of the camp towards the Danube. One of the biggest problems remains to be the determination of the *canabae*'s size. Excavated parts of the street grid and buildings in the *canabae* as well as the limited space between the legionary camp and the Danube embankment indicate a size of 25-30 hectares.[35] Still, the excavators hold the belief that singular investigated structures in the wider vicinity of the legionary camp might have belonged to the *canabae* as well, raising the size up to approximately 60 hectares.[36] Due to this situation and according to the concept of settlement dualism it has been believed that the urban settlement/city of Durostorum, which is known from inscriptions as Municipium Aurelium Durostorum, needed to be searched for elsewhere. Between 1997 and 2007, a survey and excavation project confirmed a *vicus* settlement near the village of Ostrov.[37] Various archaeologists have favoured this site for the identification of the *municipium*, as it offers a wider area for the development and growth of a civilian urban settlement.[38] Yet, two facts seem to indicate the contrary. First, the confirmed size of the *vicus* is also only approximately 25 hectares, which makes it no bigger than the *canabae*, but maybe even significantly smaller.[39] Secondly, the soil in Ostrov is very clayey and soft; it does not provide an optimal base for a larger settlement.[40] Furthermore, the discovered structures in Ostrov indicate a production centre or rural settlement. So far, numerous pottery kilns, a large *horreum* (public warehouse), and baths have been identified, all within an irregular layout. In contrast to this, the street grid in the *canabae* shows a regular and organised layout.[41] All these aspects indicate that – just as in Novae and possibly Viminacium – it were again the *canabae* that were turned into a *municipium*. In opposition to the generally leading opinion of urban development of *vici* as *municipia*, this process was already suggested by some scholars of the early debate (mostly Parvan and Gerov) and is now also favoured by most colleagues (Boyanov, Baltać, Tomas).[42] An interesting contribution to the debate can be found in the inscription, which names the *municipium* as Municipium Aurelium Durostorum. It was discovered in a secondary use as building material at the *vicus* site in Ostrov and indicates the municipal rights granting in the time of either Marcus Aurelius or Caracalla.[43] According to its reuse in Late Antiquity, the find spot does not provide any information on the municipalisation of either *canabae* or *vicus*.[44] However, another crucial inscription found in Silistra dates to the year of 209 C.E. and names *vicani*, attesting to the existence of a *vicus* at the beginning of the third century C.E.[45] If the name of Municipium 'Aurelium' Durostorum pointed to Marcus Aurelius,

this would actually be safe evidence for the *canabae*'s development into a *municipium*. If municipal status was only granted under Emperor Caracalla on the other hand, the existence of the *vicus* in 209 C.E. would not contradict municipal rights for either *canabae* or *vicus*. Thus, until the epigraphic base for Durostorum broadens, there can be only assumptions on the exact process of municipalisation. Still, Durostorum again shows that a duality of settlement structures (*canabae* and *vicus*) around legionary camps existed in Moesia, but that the conceptions archaeologists developed concerning this duality (settlement dualism, separation of military and civilian settlements both spatially and legally, urbanization of civilian settlements) are not applicable here. It also proves again that municipalisation does not necessarily give a concrete hint on the identification and character of urbanity, but maybe rather on the influence of militarily defined circumstances for settlement and population development in frontier provinces (Fig. 4).

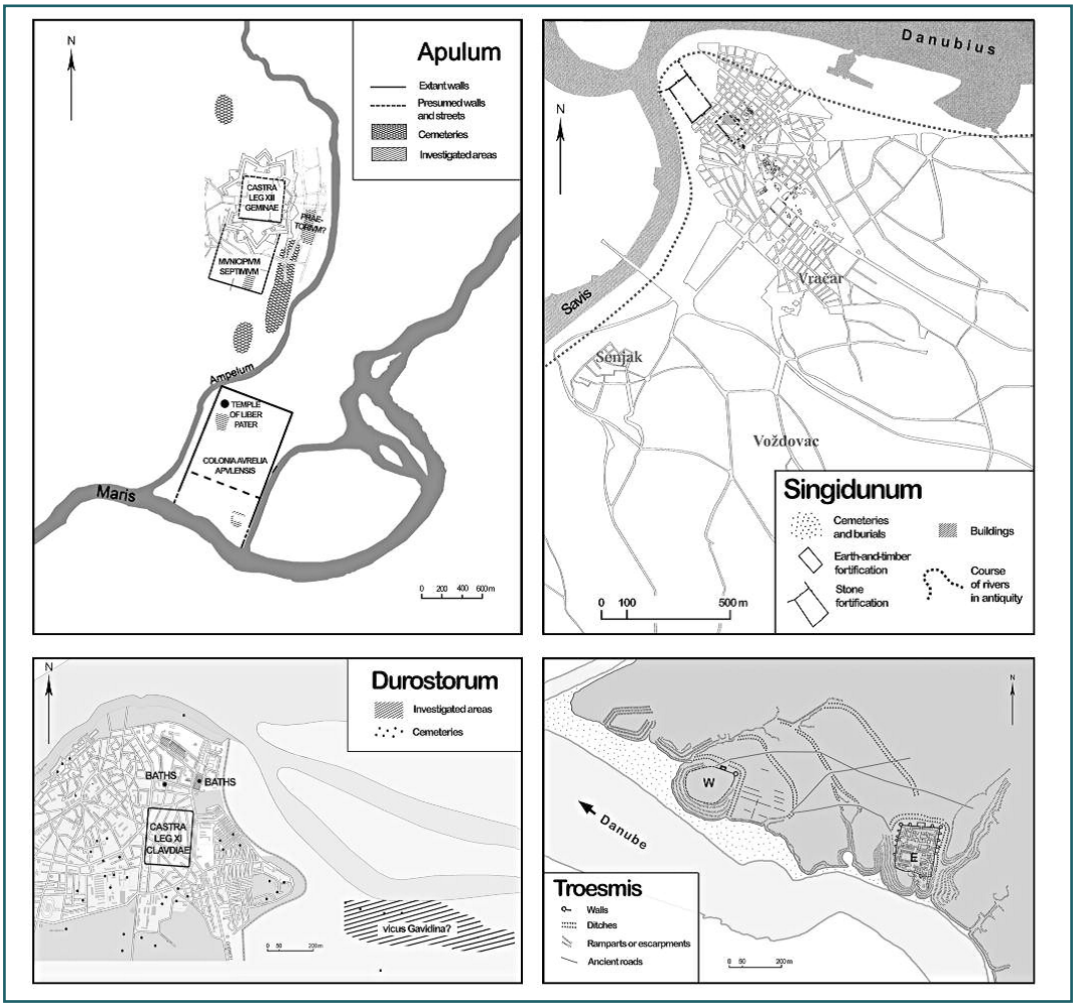

Figure 4: Spatial layout of Durostorum's various settlement structures underneath modern Silistra and nearby Ostrov. © Agnieszka Tomas, Warsaw.

Conclusion: Locating Soldiers and Civilians

The three brief case studies I discussed above showed that given the current state of research, a clear definition and spatial division of military and civilian spheres in legionary camp sites and urban centres along the Danube *Limes* is impossible. Moreover, they indicated that this might not even be useful. Contrarily, it seems that traditional concepts developed to characterize settlement patterns at sites of military deployment in frontier provinces do not suit Roman Moesia. Although a duality of *canabae* and *vici* (or more general: military and civilian settlement structures) actually existed, the conceptions tied to this settlement dualism do not apply to Moesia. Instead of municipalisation and urbanization of *vici*, while *canabae* remained militarily administered, Moesia displays a picture of either urbanization of *canabae* followed by municipalisation as a logical consequence, while *vici* remained of rather rural character (Novae, Durostorum) or urbanization as a process encompassing blurry settlement areas, whether municipalised or not (Viminacium). In both cases, military and civilian spheres in Moesia are absolutely tied together even spatially. Thus, locating people in their everyday life within the compounds of military and civilian aspects and legionary camp sites and urban centres becomes a task of social, not spatial significance.[46] The evidence from Moesia shows that it is not spheres or settlements being military or civilian but people. Social performance and identity (re-)creation are the factors defining urbanity and urban lifestyle. Therefore, it should not really be surprising to see how the military impact on population and social processes along the Danube *Limes* eventually even lead to developments in municipalisation and urbanization that initially contradict our conceptions of administrative characteristics in the Roman Empire.

A simple but very lively example for this view can be found, if we leave the Danube for the inland auxiliary fort of Timacum Minus, today's Ravna in the Timok valley, Serbia. In the area of the camp site and attached civilian settlement[47] an inscribed tombstone of late Antonine or early Severan dating was discovered.[48] It mourns the death of Ulpius Aquilinus, who died at the age of 22 while still in full service as a soldier of legio VII Claudia, whose vexillation was stationed in Timacum Minus (*'miles leg. VII Cl(audiae)'*). In addition to his active military career, he also fulfilled secretary duties (*'librarius'*) in the civil administration of the mining districts in the Timok valley close to Timacum Minus.[49] Aquilinus' service as a soldier now surely makes him a member of the military sphere. Executing civil administrative tasks in contrast attaches him also to the civilian sphere. Being an active soldier, he of course would have permanently lived in the auxiliary fort of Timacum Minus. But where did he conduct his civil administrative duties? Was there an office building in the fort or in the attached settlement and – if he had one – where did his family live? Given this situation, Aquilinus surely cannot be tied to or spatially located within either military or civilian spheres. Instead, he actively switched between both aspects, uniting them in his personal as well as social identity.[50] Although derived from a different context, the case of Aquilinus is a good starting point for thinking about the processes of urbanization and Roman urbanity construction in the legionary sites along the Danube *Limes*: Settlements are not to be defined as military or civilian, as the concept of settlement dualism or the overall fondness for categorization in Roman Archaeology might suggest. Yet, people are. They constantly dictate developments and change by performing social practice in their everyday life. Given the geographical, political and historical circumstances in the frontier province of Moesia, it seems that the military aspect in the legionary camp sites along

the Danube *Limes* was so present that it played an essential role in the process of urbanization and the forming of urban centres. This might even have culminated in the municipalisation of *canabae* due to previous developments into urban scale through social agglomeration of military and civilian agencies. Thus, it can be said that the characteristics, developments and both internal and external interactive processes of military and civilian spheres do not fit into a dichotomous concept, but are rather composed of multiple reference points in daily life and identities of Moesian soldiers, civilians and inhabitants of camps and urban settlements in general. The local differences, which are for example indicated by the probable municipal rights granting to the *canabae* in Novae and Durostorum, cannot be encompassed and explained within future research, if the typically archaeological principle of categorisation blocks the way to a more differentiated picture of dynamic, multiple and discrepant identities,[51] which are lastly responsible for deciding the belonging of people, things or spaces to military, civilian, or mixed spheres.

Endnotes:

1 Pollard and Berry 2000; Wilkes 2000.
2 Mocsy 1974; Poulter 1986; Pollard and Berry 2000; Wilkes 2000.
3 See e.g. in Conrad and Stančev 2002.
4 As for example explained by Dušanic 2000, 345. Further general notions in Mocsy 1970, 1974; Mirković 2007.
5 e.g. all the sites included in this study: Viminacium, Novae, Durostorum, Timacum Minus.
6 Ratiaria, Scupi, Oescus, Nicopolis ad Istrum. The latter one is included into this category as it surely was a newly founded city. In terms of lawful city status, Nicopolis is not attested as a colonia, but as a foundation of Greek law.
7 Viminacium, Singidunum, Margum, Horreum Margi, Naissus, Ulpiana, Novae, Durostorum, Troesmis, Noviodunum, Tropaeum Traiani.
8 Histria, Tomis, Callatis, Dionysopolis, Odessos.
9 Timacum Minus, Remesiana, Aquae, Municipium DD, Abritus, Marcianopolis, Argamum, Axiopolis, Sexaginta Prista, Montana.
10 Mocsy 1953, 188; Vittinghoff 1971; Mocsy 1972; Gerov 1977: 299; Piso 1991, 138.
11 e.g. Apulum, Dacia.
12 Bohn 1926; Mocsy 1953, 188, 194; Vittinghoff 1970; Vittinghoff 1971, 300, 302; Mocsy 1972, Gerov 1977, 299. After this discussion of text sources, I. Piso published some thoughts concerned with the archaeological verification of the lease system's consequences and settlement dualism in frontier province legionary camp sites, which has afterwards become a work of reference, cf. Piso 1991, 138-139, 160, but has never been questioned concerning Moesia.
13 Due to lacking space, the discussion will concentrate on Viminacium, Novae and Durostorum. The other permanent legionary bases along the Danube *Limes* (Singidunum and Troesmis), however, display similar circumstances and developments. A more detailed discussion is in preparation (Diers, forthcoming).
14 Mirković 1968; Mirković 1973; Pollard and Berry 2000; Milošević 2002, 151; Spasić-Đurić 2002, 21; Mirković 2007.
15 Spasić-Đurić 2002, 23-24, Mirković 2007, Mladenović 2012.
16 Korać 2006; Mirković 2007; Mrđić 2013, 272.
17 Spasić-Đurić 2002, 35; Korać 2006; Tomas 2011, 158.
18 Popović 1967; Vittinghoff 1970, 346; Mirković 1986, 28-31, addendum; Milošević 2002, 151; Spasić-Đurić 2002, 30, 36, cf. Piso's estimations on leuga in Piso 1991; Golubović 2011.
19 Valtrović, Vasić; cf. Popović 1967.
20 Mirković 2007, 53.
21 An interesting comparison can be seen in the case of Carnuntum (cf. Doneus, Gugl and Doneus 2013; Humer 2014; Gugl, Radbauer and Kronberger 2015): Here, we find two amphitheatres. One is attached

to the *canabae* and the legionary camp and dates to the early phase, one lies outside the enclosed and organized civilian settlement, which turned into a *municipium*, and dates to the second century C.E. On one hand, this situation attests to the significance of amphitheatres for military population and the urban layout of *canabae*, although they were certainly not granted legal city status. On the other hand, however, it shows that in Carnuntum people considered it necessary or preferable after the first prosperous phase of the city to provide a second amphitheatre. This might have been due to population increases or the need to divide between military and civilian population. However, both aspects do not seem to come into consideration in Viminacium. Of course, these aspects do only apply to the question of military and civilian spheres and their definition or even division. The existence of amphitheatres in legionary bases and *canabae* itself is not surprising and is – apart from Viminacium and Carnuntum - attested in three other cases (Burnum, Isca, Deva). For the amphitheatre in Viminacium in general see in Nikolić and Bogdanović 2012.

22 Pollard and Berry 2000; Conrad and Stančev 2002; Sarnowski 2012, 16, 18.

23 Pollard and Berry 2000; Sarnowski 2012, 18.

24 Sarnowski, forthcoming.

25 Vittinghoff 1970, 346, 347; Dorutiu-Boila 1978, 245.

26 Doritiu-Boila 1978, 245; Dimitrova-Milčeva 1991; Sarnowski 2012, 20.

27 Tomas 2011, 161; Sarnowski 2012, 79.

28 Tomas 2006; Tomas 2011, 157; Jaworski 2013, 52.

29 Tomas 2006; Tomas 2011, 160.

30 Dimitrova-Milčeva 1991; Tomas 2011, 159.

31 Tomas 2006; Tomas 2011; Sarnowski 2012.

32 Sarnowski 2012, 27.

33 Vittinghoff 1970, 346; Donevski 1990a, 931; Donevski 1991; Ivanov 2006; Damian and Baltac 2007, 62.

34 Donevski 1990a; Donevski 1990b; Donevski 1991; Donevski 2012; Ivanov, Atanasov and Donevski 2006.

35 Damian and Baltac 2007, 63; Boyanov 2010, 53.

36 ИВАНОВ, АТАНАСОВ and ДОНЕВСКИ 2006, 227.

37 Donevski 1990a, 931; Damian and Baltac 2007.

38 e.g. P. Ivanov, P. Donveski and E. Dorutiu-Boila; see in Ivanov 2006; Donevski 1990a, 1990b; Dorutiu-Boila 1978.

39 Damian and Baltac 2007, 65; Boyanov 2010, 54; Tomas 2011, 157, Ivanov 2012; Ivanov unpublished.

40 Boyanov 2010, 54.

41 Boyanov 2010, 55.

42 Parvan 1924; Gerov 1977; Damian and Baltac 2007; Tomas 2006, 2011; Boyanov 2010.

43 Dorutiu-Boila 1978, 246; Ivanov 2006.

44 Boyanov 2010, 54.

45 Boyanov 2010, 55.

46 Recently, urbanism and urbanity studies in Roman Archaeology experienced a process of re-emphasis. In contrast to previous rather processual views of urbanization as political and economic patterning, current trends focus on the aspect of social practice and performance: Urbanity is seen a a construct of performing everyday life in a changing landscape of identity (re-)creation and social negotiation. Although concerned with a totally different geographical area and time (medieval towns and cities in Scandinavia), these concepts have now been impressively applied, questioned and discussed in Christophersen 2015; Fleisher 2015; Kalmring 2015; Müller 2015; Smith 2015. For general aspects of performing personhood and everyday life see in Fowler 2004; Schatzki 2008, especially in antique contexts and urban settings cf. Smith 2011.

47 Unfortunately, there can only be speculations about the layout and character of the vicus site, since it is mostly overbuilt by the modern village of Ravna and the attached farmland. Problems with the local inhabitants have lead to the situation that surveys or prospections could not have been conducted so far.

48 Dušanic 2000, 354.

49 For a full translation, revision and discussion of the inscription see in Dušanic 2000, 354-55, 357.

50 For the constructive theoretical conception, application and development of the identity paradigm in current Roman Archaeology see in Graves-Brown 1996; Chapman 2002; Mattingly 2002; Fowler 2004; Gardner 2004; Mattingly 2004; Diaz-Andreu and Lucy 2005; Mattingly 2011; Gardner 2013; with special emphasis on the military sphere: Blagg 1984; Gardner 2007.

51 The term and concept of ‚discrepant identities' was introduced first and very convincingly in Mattingly 2004.

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Between Street Vendors, Singing Slaves, and Envy

Sylvain Vanesse

When the well-known "House of the Ephebe" was excavated in Pompeii, a statuary group composed of four bronze figurines was found. Those small statues are now known as "Placentarii", namely "pastry cooks." They were given this name because they were thought selling their products placed on a plate, shouting to attract the clients. This interpretation explains the particular hand gesture of those men, touching their throat. This theory seems very conceivable and is generally accepted by a large scientific majority. However, some iconographic elements don't fit with this hypothesis. Indeed, how do we explain the nakedness of those four men, their thinness, their weird facial features and their disproportionate phalluses?

Other figurines – terracotta, bronzes, amulets, mosaics – depicted with the same specific features were found among the archaeological material from the Mediterranean basin. There is –nearly– no question that those objects are representations of the Envy personified, also known as Phthonos, or of an envious person (phthoneros). Would it be possible to see in those four bronzes not –only– pastry cooks, but an embodiment of Envy, filled with apotropaic value? A fresh perspective –literary and archaeological– will help and issue a clarification about this new theory.

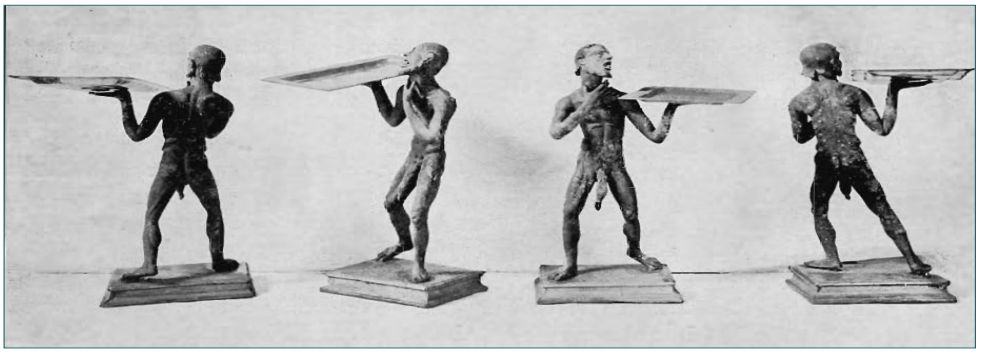

Figure 1: The four bronzes found in the house of the Ephebe, in Pompeii, known under the term "Placentarii" - (Maiuri 1925: 268, figure 1).

Introduction

On 28 May 1925, the archaeologist Amadeo Maiuri found the site known today as the House of the Ephebe, or House of P. Cornelius Tages in Pompeii.[1] In the *tablinum*[2] of this house was found a statuary group, composed of four gilded bronzes, locked in what is thought to be a wooden chest.[3] The four statuettes (Fig. 1), dated from the Late Republican or the Early Imperial period, are now kept in the National Archaeological Museum of Naples.[4]

The four bronzes depict relatively old and naked men of twenty centimeters tall. They work in two mirrored pairs: two of them carry a silver rectangular tray in their right hands, the other two in the left ones. Each statuette stands on a rectangular base. Apart from some details, the four have similar grotesque physical characteristics: they are old, with emaciated, almost skeletal bodies. This thinness is stressed by the exaggeratedly visible backbone, by the rib cage and by their protruding shoulder blades. Their face also display grotesque features. In fact, their ears, their mouths, their noses, their eyes and eyebrows are all, to different degrees, modified from reality. Their heads, slightly lifted heavenwards, show bald skulls, pointed beards, and sunken cheeks. They seem to scream with their mouths wide open. Their free hands are reaching for their throats, while the others carry the tray.[5] Maiuri described them as showing an "obscene nudity", due to the way their oversized and flaccid phalluses hang down to their knees.[6]

The overall effect of the bronzes' features is one of grotesqueness, owing to their thinness, winces, and oversized phalluses. However, they present a certain verism, particularly because of the detailed shape of the muscles and some other physical features.[7]

The name under which these four bronzes are known, the *Placentarii*, is owed to Maiuri. The archeologist gave them this name because he saw this statuary group as four pastry vendors. In Latin, there is a kind of pastries called *placentae*, which were sold by *placentarii*.[8] This idea came to Maiuri from a personal experience in Naples where it was common to find street vendors carrying their trays and boasting the quality of their goods.[9]

Function and meanings

As already mentioned, the four bronzes were found in a presumed wooden box in the office room (*tablinum*) of the house. Because of this effort of conservation and protection, added to the high quality of the representations, the material used

by the artist and the gilding, this statuary group was unquestionably of high-value. Their service posture and the presence of silver trays suggest that these bronzes are pieces of furniture, used during sumptuous banquets, gathering high-ranking people.[10] They are certainly sauceboat bearers or condiments and food carriers.[11]

The heart of the problem is not the function of the bronzes, but the meaning of their aspect. What did the artist want to represent? Is there any link between the function and the representation? Many scientists suggested identifications for these bronzes – which will be reviewed – but owing to different elements, a new hypothesis could be proposed.

In fact, the iconography of these four men has some commonalities with another iconography, that of the personified Envy – *Phthonos* in Greek or *Invidia* in Latin. This contention comes from observations made on the aesthetic features of the four men, compared to other ancient artistic production.

Particular features

Every element and aspect chosen by an artist has its own importance and reflects a conscious choice.[12] Following R.R.R. Smith: "Images were not reflectors, but like texts and speakers, active participants in public discourse."[13] Exaggeration and stress of some features bring to light what was really important for the artist or the client,[14] or the aesthetic appeal of these figurines.[15]

Several ancient depictions depart from the aesthetic ideal widespread in the ancient world. But with the number of those representations, which oscillate between realism and the grotesque, people must have appreciated this kind of art.[16] There is evidence for this in a couple of literary examples:

> When we see emaciated people we are distressed, but we took upon statues and paintings of them with pleasure because our minds are captivated by imitations which we find endearing.

--Plutarch, *Quaestiones Conviviales* V 1.

> Out of a legacy which I have come in for I have just bought a Corinthian bronze, small it is true, but a charming and sharply-cut piece of work […]. For it is a nude, […]. It represents an old man in a standing posture; the bones, muscles, nerves, veins, and even the wrinkles appear quite life-like; the hair is thin and scanty on the forehead; the brow is broad; the face wizened; the neck thin; the shoulders are bowed; the breast is flat, and the belly hollow. The back too gives the same impression of age, as far as a back view can. […] In fact, in every respect it is a work calculated to catch the eye of a connoisseur and to delight the eye of an amateur, and this is what tempted me to purchase it, although I am the merest novice.

--Pliny, *Epistulae* III 6.

Plutarch and Pliny express clearly the idea of a "double view": what is considered ugly in everyday life can become a source of admiration in the artistic field. In general, Greco-Roman art displays a standardized beauty resulting from an aesthetic fixed by Polyclitus.[17] Thus, thinness, obesity, old age, or illness were not major artistic themes.[18] Every deviation of every feature from the standard corresponds to an aspect of the character or behavior of the represented subjects. For this reason, it is important to study each grotesque feature

included in this statuary group. These particular features (thinness, grotesque facial characteristics, an oversized phallus, and the "hand to throat" gesture) and their understanding allow drawing parallels with other iconographies, such as the Envy's one, as already mentioned.

Thinness

The four men of the Pompeian statuary group are thin, in spite of some prominent muscles. This particularity brings them closer to a naturalist artistic vein. Ancient artists used extreme thinness and emaciation to express several things, in both literature and iconography. It is bound to poverty, to disease, to old age and to other "physiognomic" conceptions.[19]

It is clear that ancient populations presented an obvious thinness, due to lack of food or supply problems. So, thinness was above all a social status indicator, explaining why this characteristic is very present in the naturalistic figures. However, people displaying an extreme thinness are moved to the edge of humanity, to a grinding poverty and to the margins of civilization.[20]

Diseases could also explain an emaciated body.[21] The ancient doctors considered the thinness as a possible symptom of the pulmonary tuberculosis, best known as consumption.[22] Old age may also play a role in thinness. The best way to illustrate this is the case of Geras, the personification of Old Age, who is depicted as a thin old man.[23] Finally, the thinness can symbolize moral characteristics such as a stoic abstinence; philosophers are generally depicted with thin, old-mannish features.[24]

Some authors who were engaged in physiognomy interpreted emaciation a bit differently.[25] A man with a thin body could be recognized as an envious person. This thought is found for the first time in Menander.[26] The same conception is found in Ovid, when the author describes the personification of Envy (*Invidia*), and in Lucian, in the description of a painting where *Phthonos*, the Greek counterpart of *Invidia*, is depicted.[27]

Grotesque facial features

As already mentioned, the four bronzes display facial features modified from the reality. Their ears, their mouths, their noses, their eyes and eyebrows don't mirror a real physical state, hence the use of the term "grotesque" to describe this group.[28] They don't show extreme iconographical exaggerations but many parallels can be drawn between them and other ancient production: the Pompeian bronzes have prominent noses, pronounced brow bones overhanging piercing eyes, big ears, and a half-bald heads as in the grotesque statues (Fig. 2). In addition, the "hand to throat" gesture provides the four bronzes a much more distinct facial expression. The personified Envy is generally depicted with such characteristics. *Phthonos* is suffering from the inside to the point of distorting his facial features (Fig. 3).

Oversized phallus

The phallus in art is extensively documented through the whole Mediterranean basin and through the centuries.[29] Usually represented erected, the phallus is connected to the god Priapus. It is the symbol par excellence of virility and male fertility, or it assumes a strong apotropaic function against the Evil Eye.[30] However, the phalluses of these miniatures are flaccid, not erect. What do they symbolize then? The personifications of Envy have also such phalluses (see Fig. 3) and this particular feature is explained by the inherent apotropaic function of these objects. This characteristic for the Pompeian statuary group will be discussed in more detail later.

The "hand to throat" gesture

The last point to be mentioned is probably

Figure 2: Detail of one "Placentarius" bronze - Photo by S. Vanesse.

the most meaningful. Each of the four men brings his free hand to his throat, as if preparing to touch or enclose it. The artist seems to have depicted a pending action. So, is this the indicator of a street vendor job, as Maiuri thought? Maybe this gesture is bound to another meaning: what if it was a sign of choking or the beginning of a self-strangulation?

The facial expression of the four men is clear: they are suffering. The choking would explain the position of their heads and why their mouths are wide open, with their tongue showing. The "complete hand to throat" gesture – namely the hand enclosing the throat – is seen in several ancient objects, such as terracotta figurines, bronze or gold amulets, and was interpreted from a medical perspective. The hand is placed where there is a pain. Some experts of ancient medicine defined such gestures as tuberculosis cases in which sufferers made them because of a bad cough.[31]

Figure 3: Bronze statuette, from Alexandria – 2nd c. B.C. – National Archaeological Museum of Athens (inv. 447).

Once again, a link with Envy's iconography can be drawn. This "hand to throat" gesture is typical of *Phthonos/Invidia*. As a proof, Silius Italicus, a Roman poet, described Envy – under the name *Livor* – as a terrible resident of the Underworld, characterized by the self-strangulation gesture.[32]

The personification of Envy

The distinctive features discussed previously are reflected in the iconography of Envy.[33] Many ancient writers have described this personification, as mentioned earlier. Among them, the Roman poet of the late 1st c. B.C., Ovid, who said in his *Metamorphoses* that this divinity was thin, pale, and terrible.[34] Silius Italicus talked especially about the self-strangulation gesture.[35] Lucian of Samosata, a Greek rhetorician of the 2nd c. A.D., described *Phthonos* as "a man with piercing eyes, but pale, deformed, and shrunken as from long illness."[36] These literary examples show that Envy was seen as thin, pale and choking himself and have echoes in the figurative arts.

This iconography, mainly preserved on terracotta statuettes, bronze miniatures, gold amulets and mosaics, was first connected to pathological grotesques, before being identified as Envy. One example bridges the relationships between the literature and the iconography: a 3rd century A.D. mosaic from Cephalonia.[37] On this mosaic, a thin man is drawn choking himself, being attacked by four beasts. Under this image, an inscription explains the meaning of this entire mosaic panel. This is a representation of Envy, being attacked by animals. It is a representation with a clear apotropaic purpose: this image warned Envy of the fate that awaits him if he dared to come in the house. This purpose is inherent in all the other representations of Envy.[38] Another striking example of this particular iconography is a bronze statuette from Alexandria, kept in the National Archaeological Museum at Athens, already mentioned previously.[39] On this little Hellenistic bronze, one can see the same features. There are only two main differences between this Greek statue and the four Pompeian ones: the *Phthonos* from Athens stands with his two legs closed and chokes himself with both hands. Apart from that, a link between this statuette and the four bronzes seems possible.

Figure 4: So-called "Morio" terracotta vase, from Herculaneum – 1st c. A.D. – National Archeological Museum of Naples – Photo by S. Vanesse.

Another example deserves some additional words, mainly because it presents the same gesture as the four bronzes. This is a curious terracotta vessel of a dwarf, generally known as *Morio* and found in Herculaneum. He shows a terrible expression of pain through his exaggerated facial features (Fig. 4). As with the four Pompeian bronzes, he puts one hand to his throat, while he holds some *tabellae* (wax tablets) in the other. His flaccid phallus is used as a pouring spout. Here, the significant difference with the statuary group lies in the fatness of the dwarf. Can this jug be a representation of a grotesque Phthonos or is it only a simple grotesque representation?[40] There is no basis for definite conclusion, but an iconographic parallel can be made.

The objects whose "phthonian" identification is attested were used as talismans against Envy. This iconography had various protective components: oversized phallus, wincing, grotesquerie, etc. Every effort was made with these objects to ensure an effective protection. So, do the four bronzes pieces of furniture have some apotropaic purpose? Are they a warning for guests not to lapse into envious behaviors? This is a possibility, since the Romans loved such moral lessons.[41]

Other hypotheses

This theory of a probable connection between Envy and the four Pompeian bronzes has never been mentioned up to now. The most widely known and accepted hypothesis in the scholarly community is that of Maiuri's.[42] As a reminder, he saw this statuary group as four pastry vendors, giving them the name of *placentarii*.[43] The archaeologist explained their "hand to throat" gesture as the symbol of the vendors' cry.[44] Maiuri added also that the four men must surely be Jewish or Asian, because of the habit of these people to occupy commercial business in ancient times. Of course, this idea, based on a fascist spirit commonly found at that time in Italy, has no scientific foundation.

Noel Lenski, Professor of Classics and History at Yale University, proposed another theory. According to him, instead of street vendors, they could be four servants.[45] He assumes that they could be African, possibly because of their oversized phalluses. He explains that the "hand to throat" gesture is not the symbol of a cry, but an indication that they are singing. To support his claim, he came up with two pieces of evidence. The first one, from the *Satyricon* of Petronius, a Roman writer of the 1st c. AD, involves a young male slave singing the songs written by his master, while at the same time distributing grape bunches to the guests.[46] As his second argument, Lenski also drew a parallel with the colonial iconography in Europe and in America that was used to represent African slaves.[47]

In some ways, these theories provide an explanation of this particular iconography. However, several aspects were not taken into account. Let's begin with Maiuri's Jewish or Asian identification. This idea comes from a time marked by prejudices, and simple observation makes it obsolete; none of them are circumcised, ruling out the Jewish hypothesis, and neither is there any valuable reason to accept the Asian interpretation.[48] As regards to the *placentarii* theory, several elements cast doubt upon its validity. First of all, why would street vendors be naked, displaying such an ungainly and grotesque body? According to Lenski, it seems unthinkable to imagine naked street vendors in such a poor condition, even if in fact these bronzes show a real verism.[49] The nudity reminded the Romans of a wild, barbaric state; it was the sign of a social exclusion.[50] Slaves were sometimes characterized by nudity, but it was not their permanent state.[51]

The issue about nudity is related to the obscenity, mainly because of the question of the oversized phalluses. This feature usually belonged to Priapus, the god of obscenity.[52] In Rome, obscenity was dependent on the context,[53] but what about these four bronzes? If they are pieces of furniture used during banquets, we are, as Cordier said, in a space on the brink of the public, which does not have the same impunity as the private. There, you cannot do or show what you want as you want.[54] Thus, there have to be good reasons to explain their nudity and exaggerated phalluses if it is not because of the taste for the grotesque.[55]

Also concerning Maiuri's identification, the term used by the archaeologist to name this statuary group – *placentarii* – brings some problems. This term is not classical; it is particularly found in Late Latin.[56] It

comes from the *placentae*, which are a kind of honey cake cooked for special occasions, as mentioned previously. It would have been more appropriate to give the bronzes a more classical name, since they date from the Late Republican or the Early Imperial period. Moreover, there is no literary testimony, nor any representation of such obscene pastry vendors. Maiuri's approach to this hypothesis may also be debatable, particularly in using modern parallels to explain an ancient phenomenon.[57] All these problems undermine Maiuri's interpretation.

Concerning George's theories about African singing slaves, there are additional reservations. An African origin is not really justified by real attributes.[58] The oversized phallus seems to be a more modern stereotype.[59] Is it possible that they are singing slaves? Slaves, as mentioned earlier, were not naked during service. They wore a specific tunic,[60] which differentiatesd them from other people. It is also seen in art, even if some slaves are depicted naked, which is not the standard. Moreover, the masters used to have beautiful and young slaves to show how wealthy they were. If these were realistic slave representations, then one would expect young and beautiful men and not old, emaciated, grotesque ones.

In short, whether they are slaves or street vendors, nudity, old age, obscenity and grotesquerie cannot be entirely explained. Additionally, it is perhaps too simplistic to say that such grotesque features are purely comedic and chosen by the artist for a humorous purpose. If so, the bronzes would have been more uncomplicated. There should be a moral meaning underneath these bronzes.

Conclusion

Maiuri wrote in his paper that he did not see what else they could be if they weren't street vendors. I think I have made clear, as did Lenski before me, that they can be many other things. This study, before proposing a particular iconographic parallel, reminds us that gestures and their meanings are cultural phenomena, first and foremost. Many things have changed since antiquity, making the convocation and the use of modern conceptions to explain ancient traditions very delicate.

As a reminder, the four Pompeian bronzes display common features with the particular iconography of personified Envy. Envy and the four bronzes have extreme thin bodies, grotesque facial features (as large mouth, big eyes, eyebrows and ears, bald heads, etc.), oversized phalluses and are nearly similar in the "hand to throat" gesture. The representations of Envy were used as apotropaic objects. If my assumption is true, it is thus not unthinkable that the four bronzes had a higher meaning than just a humorous function. Suggesting that the guests could see these bronzes as reminders of Envy's risk does not seem any more far-fetched than considering them as singers. This new theory gives them a new moral dimension prized by the Romans, which deserves further considerations.

Of course, I do not claim my theory solves everything. It does not provide a final answer to the question of the identity of this statuary group. However, these comparisons deserved to be highlighted.

Endnotes:

1 Reference number: I, VII, 10–12. It is located along the Via dell'Abbondanza. Its name comes from the discovery of a torch carrier portrayed as a beautiful ephebe, in the garden of the site.
2 In the Roman houses, the tablinum is a room generally situated on one side of the atrium and opposite to the entrance. It was the master's office.
3 Maiuri (1925: 268) interpreted the burnt remains surrounding these figurines as a wooden box.
4 Their inv. numbers are 143758–61. Needless to say they do not date later than 79 A.D.
For a more detailed description, see Maiuri 5 1925: 268–70.
6 Maiuri 1925: 270.
7 Ballet and Jeammet 2011: 40.
8 Maiuri 1925: 272; Lenski 2013: 145–46. See also TLL, vol. X, Pars prior, Sectio II, col. 2289 s.v. placuntarius, which refers to Paulus, Sententiae.
9 Maiuri 1925: 272.
10 On account of the size of the house, the masters were obviously wealthy.
11 This kind of objects are not really common. However, a parallel can be made with another statuary group composed also of four bronzes. See Francken 2004.
12 Bradley 2011: 4.
13 Smith 1997: 194; Cordier (2005: 347) adds: "La statue prend sens pour qui maîtrise son langage; autrement, elle n'offre au regard qu'une feraille bonne pour la fonderie ou, au mieux, l'image pénible à voir d'un organisme décrépit".
14 Bradley 2011: 4.
15 What was considered as terrible in the everyday life could be appreciated in art. Cordier (2005, 346) says also: "la pierre et la chair n'appellent pas le même type de regard".
16 A simple search on internet under the terms "hellenistic grotesque terracotta" is sufficient to see striking examples.
17 Polyclitus wrote an artistic treatise – lost – in which he developped a new approach to sculpture. The perfection of a statue was based, following him, on mathematical proportions.
18 Bradley 2011: 34.
19 Physiognomy was an ancient thought that a person's character or personality was linked to his or her outer appearance.
20 Bradley 2011: 8.
21 Grmek and Gourevitch 1998: 145.
22 Mitchell 2013: 288. However, the Ancients considered a thin body to be better for health than a fleshy one.
23 Son of Nyx (Hesiod, Theogony, 225) or of Erebus (Hygin, Fables, preface) Geras is depicted with Heracles on various vases. E.g. a red figures Attic pelike dated from ca 500 - 450 BC, kept in the Museo Nazionale Etrusco di Villa Giulia, Rome, Italy (inv. 48238). See: http://www.theoi.com/Gallery/N18.1.html.
24 Bradley 2011: 20.
25 This method supplies an overview of somebody's character based on his physical appearance. This "art" had a great success during antiquity and was practiced by many ancient doctors, such as Hippocrates or Galen.
26 Dunbabin and Dickie (1983:15). Menander compares the effect of envy on the human spirit as the rust on the metal.
27 Ovid, Metamorphoses II 775–80; Lucian, De calumnia 5.
28 Under this name, the scientists gather a series of works whose aims and outlines are unclear. See Stevenson 1975: partim; Hasselin Rous 2009: 170.
29 Johns 2000; Orrells 2005; Younger 2005, 94–95.
30 Dunbabin and Dickie 1983: 31; Slane and Dickie 1994: 487–88; Crocquevieille 2009: 93; Dasen 2015: 185–89.
31 Grmek and Gourevitch 1998: 146.
32 Silius Italicus, Punica XIII 579–84.
33 This personification is known under various names in Greek and Latin: Phthonos or Baskaina in Greek, Livor or Invidia in Latin.
34 Ovid, Metamorphoses II 775–80. In this text, Envy is a female divinity because her Latin name is Invidia.
35 Silius Italicus, Punica XIII 579–84.
36 Lucian, De calumnia 5.
37 Dunbabin and Dickie 1983. You can see a picture of this mosaic by searching "Phthonos Skala" on the Internet.
38 Dunbabin and Dickie 1983.
39 Museum number: inv. 447.
40 The dwarf, as the four bronzes, could touch his throat with only one hand because the other one is occupied with another task.
41 Some silver drinking cups, decorated with skeletons, were found in various excavations (e.g. at Boscoreale). This morbid decoration should be understood as a "memento mori", reminding guests that they must enjoy life, because it is short. Our bronzes, if they possess something of the Envy, could be understood in a similar moral way. They have perhaps a link with the sumptuous domus were the guests gathered, the house owner playing with the guests emotions felt during the dinner. The meaning of such a group could have been: "be careful, envy and jealousy have a terrible influence on the spirit and can destroy a man."
42 This identification is repeated in various modern works. See, e.g., Jashemski 1979: 146, fig. 149; Pirzio Biroli Stefanelli 1990: 282; De Caro 1994: 244.
43 Maiuri 1925: 272; Lenski 2013: 145–46. See also TLL, vol. X, Pars prior, Sectio II, col. 2289 s.v. placuntarius, which refers to Paulus, Sententiae.
44 Maiuri 1925: 272.
45 Lenski 2013: 145–46.
46 Petronius, Satyricon 41.
47 Lenski 2013: 146.

48 Lenski (2013: 145) also criticizes the Jewish identification.
49 Nudity was not a problem, but was restricted to defined contexts. Given the large amount of naked statues found throughout the excavations, it is generally thought that nudity was a normal thing for the Romans. It's not true, but all is a matter of context.
50 Cordier 2005: 76. He (2005, 148) adds that even the beggars at least wore rags. This fact shows that nudity was shameful.
51 Cordier (2005: 149, 152–53) says that to emphasize the social disruption, the slaves were stripped bare during their sales. In this way, they were not people anymore, only things. However, the master had to provide clothes to his slaves once the sales were made. See also Gardner and Wiedmann 2001; Dunbabin 2013: 100–101, fig. 52–53.
52 Cordier (2005: 262, 265–66) says it was not a violent, aggressive or insulting obscenity. What was indecent in a public context may not have this resonance in private.
53 Dupont and Éloi 2001: 153–55. The authors cite in particular Cicero, De officiis I 127.
54 Cordier 2005: 265.
55 Beginning in Hellenistic times, a particular taste for ugliness appears. The Romans also adhered to this taste. There are several reasons for this artistic vein: humor in the deformity, protection against the Evil Eye, etc.
56 Paulus, Sententiae III 6.72.
57 It is dangerous to project modern considerations on ancient cultures.
58 Bradley (2011: 18) says that "African [peoples'] popular images in private collections in Hellenistic and Roman Italy, often exhibited protruding bellies as a symptom of their strange physiology."
59 We have some representations of African people with oversized phalluses, but it doesn't seem to be the standard. See Snowden1970 for pictural examples.
60 Dunbabin 2003: 446. Lenski pointed out that they couldn't be street vendors because of their nudity. We could say the same, mutatis mutandis, for his theory.

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The Rise of the Individual in Late Iron Age Southern Britain and Beyond

Andy Lamb

This paper examines the archaeological evidence which exists for the increased visibility of the individual in Late Iron Age (c.150BC-AD43) southern Britain, in contrast to the preceding Middle Iron Age (c.500/450-150BC). Using mortuary data from fifty sites in southern Britain, it demonstrates how, at the beginning of the Late Iron Age, there was an increased emphasis on individual identity. This change can be detected through the emergence of archaeologically visible mortuary rites, as well as new forms of material culture recovered from domestic and mortuary contexts. This abundance of new artefact types includes personal adornment and toilet equipment, and appears to reflect an increased emphasis on individual, as opposed to communal, identity. This period also sees the emergence of elite dynasts who supplanted the earlier, egalitarian leadership. Contextualised within the broader world of Late Iron Age Atlantic Europe, we observe that the communities of southern Britain were not alone in seeking to emphasise individual identities. Comparable developments in mortuary rites are observed in Ireland and Atlantic Scotland, as well as the appearance of metalwork and sculpture in Britain, Britany and North West Iberia which depicts human form.

Introduction

In the later first millennium B.C.E., the communities living on the English Channel coast in Britain engaged in a variety of ritually structured practices, ranging from placing weapons in rivers to offerings of animal parts and domestic objects in pits. One aspect of ritual existence that has left limited evidence, however, are mortuary practices. This lack of evidence is particularly stark when we consider the data for certain areas of contemporary continental Europe.[1] For example, a single cemetery from Bobigny, Seine-Saint-Denis, contained c.530 inhumation burials,[2] approximately equal to the entire inhumation dataset in the author's present study (N=527). Nevertheless, thanks to an increase in fieldwork over the past 40 years,[3] this dataset is now sufficiently robust and varied, to allow new conclusions to be drawn. This paper presents one aspect of the author's ongoing research - the emergence of archaeologically identifiable individualised identities in the final centuries of the Iron Age.

The Channel communities in the Later Iron Age

The period examined is termed the Later Iron Age[4] dating from c.500/450 B.C.E until the Roman invasion of 43 C.E. Additionally, data for the period 43 C.E. to c.70 C.E have been included, because it is accepted[5] there is little observable discontinuity between pre- and post-conquest Britain until the Flavian period (69-96 C.E.). This timeframe is sub-divided into three phases: Middle Iron Age (MIA), c.500/450-150 B.C.E., Late Iron Age (LIA) c.150 B.C.E.-43 C.E. and Early Roman Iron Age (ERIA) 43 C.E. -c.70 C.E. (although it may date as late as the mid-second century C.E.). The archaeological justification for these phases are outlined below.

The area in question (Fig. 1) consists of counties which boarder the English Channel (including the Isles of Scilly, Cornwall, Devon, Sussex, Kent, and the counties of Wessex). Of these the Wessex dataset is the best researched.[6] It reveals a general pattern during the MIA where human remains are largely represented by disarticulated human bones, often recovered from pits and other non-funerary contexts (not formal graves), as well as a smaller number of inhumations and articulated sections of human remains from the same types of contexts. The small numbers of inhumations from this period (N=218 for the author's dataset) appear to be non-normative. The bodies within them display a lack of uniformity in terms of positioning and orientation. Furthermore, certain sections of the population are over-represented, rather than displaying a balanced or 'standard' demographic profile.[7] The items associated with these remains are typically

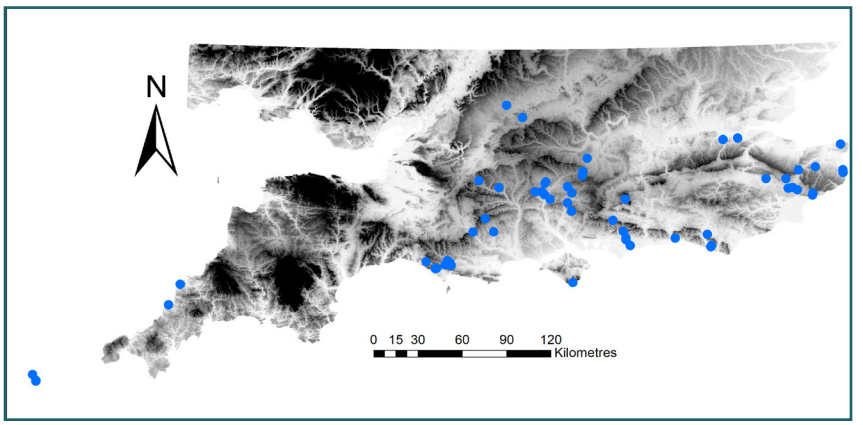

Figure 1: Map showing distribution of sites employed in author's dataset.

broken and arranged seemingly randomly without reference to the human remains.

A particular focus of deposition appears to have been the hill-forts of the region, which likely functioned as communal centres. The exact differences between hill-forts and other enclosed settlements are beyond the scope of this paper. However, hill-forts may be contrasted with other enclosed settlements in that they occupy upland locations in the landscape, possess extensive, often multi-vallate earthworks, and are located away from agricultural lands.[8] Support for the theory that hill-forts were communal centres may be seen in their substantial enclosing earthworks. The earthworks of Maiden Castle, Cadbury Castle and Danebury, for example, would have required large numbers of people to construct.[9] The large numbers of pits and granaries at sites such as Danebury, which were well in excess of the number of possible inhabitants,[10] suggests that produce from the surrounding area was stored in them. Other settlements have also produced human remains from the same context types.

It is broadly agreed by mortuary specialists,[11] field archaeologists,[12] and osteologists of this period,[13] that the lack of human remains recovered stems from an archaeologically invisible rite, such as excarnation, being employed. Excarnation is the practice by which the dead are exposed, rather than interred in the ground. The result is that the chances human remains entering the archaeological record are greatly reduced, as parts of the corpse are lost to the effects of weather and or scavengers. There is no standard method of excarnation, with considerable differences between societies.

During the LIA important changes occurred. In eastern Wessex many hill-forts were abandoned[14] and new inhumation and cremation cemeteries were established at smaller settlements. In the west of Wessex, hill-forts remained in use, albeit with some decline. Normative inhumations, in which the majority of the cemetery population is orientated in the same way, with no marked overrepresentation of males or females in adult graves, appears earlier in this area. Such cemeteries emerged in both the west and east of Wessex. Of these the Durotrigian[15] group of the east is of note as it appears to represent a historically attested group who inhabited the area. Durotrigian cemeteries were typically located in association with either new settlements, or the entrances of old hill-forts.

A similar pattern is also recorded in Kent and Sussex as that observed in Wessex. There is less evidence for disarticulated human remains, although this may stem from the more limited nature of archaeological fieldwork in the region and acidic soils of Kent that limit preservation. As in Wessex, new, normative inhumation cemeteries were established. The earliest example of one such cemetery is that of Mill Hill, Kent dating to c.250 B.C.E.[16] In the first century B.C.E. the Aylesford-Swarling mortuary culture also emerged in this region.[17] This culture employed Gallic-style cremation rites and was subsequently adopted in Wessex (as described above), and also in the counties north of the Thames. In both Wessex and Kent/Sussex, there is limited evidence to suggest the existence of elites during the MIA.[18] During the LIA, however, there is increased evidence for social stratification. Coinage was minted and circulated, and ceramic forms changed from vessels apparently designed for communal use to personal dining. Post 50 B.C.E, several kingdoms became established in this region.[19]

In the western portion of the study area, the Isles of Scilly, Cornwall and Devon, the data is more distinct. Despite the existence of numerous enclosed sites comparable to those observed in Wessex, disarticulated remains and non-funerary context depositions are unknown. As with Kent, this may be due to the acidic soils of the region,[20] but may also be a reflection of depositional practices. Normative inhumation appears in the mid-third century B.C.E.,[21] but does not appear to have been widely adopted until the LIA. However, this late abundance of burials may reflect the lack

Data type	Middle Iron Age (N)			Late Iron Age/Early Roman Iron Age (N)		
	Funerary	Non-funerary	**Total**	Funerary	Non-funerary	**Total**
Inhumation	88	130	**218**	236	61	**297**
Cremation	6	0	**6**	216	5	**221**

Table 1: Distribution of data according to context and period.

of modern excavations undertaken in this region. At the poorly recorded site of Harlyn Bay, Cornwall c.130 graves were excavated in the 19th century,[22] with grave goods appearing to indicate to a fourth century B.C.E. origin for the cemetery.[23]

The Rise of the Individual

Using data from 60 sites it is possible to detect some interesting patterns. Upon initial glance (table 1) it would appear that there is no great difference in the number of MIA and LIA/ERIA inhumations: MIA N=218, LIA/ERIA N=297. However, of the MIA inhumations, only 40.3% (N=88) occur in funerary contexts (purposely dug graves), with 50% (N=44) of MIA funerary contexts being from a single site, Suddern Farm, Hants. At this site inhumations, although placed within purpose dug graves, were situated within a disused quarry; a practice without parallel in the LIA/ERIA. 44% (N=97) of MIA inhumations occur as pit deposits, with the aforementioned non-normative characteristics and the remainder of inhumations come from other, non-funerary contexts. Turning to the LIA/ERIA there is a marked increase in the use of funerary contexts (79%, N=236). The change is even more apparent for cremations, with all but five examples (unknown contexts, N=3; pit contexts N=2) having been placed in funerary contexts (N=216). Of these only 2.7% (N=6) are date to the MIA. Thus, in both inhumation and cremation categories we see a large increase in the number of individuals being afforded normative burial rites.

Additionally, there is the evidence from grave goods. The debate surrounding the significance of grave goods has varied over the years. Initial interpretations by Culture Historians held grave goods as being indicative of ethnicity.[24] For processualist they represented idealized social personas, in which grave goods could be used to reconstruct roles within a society.[25] Post-processualists have instead viewed them as a form of communication intended for those who witnessed the funeral.[26] Whether grave goods represent social personas, were a form of communication, or a combination of both, their inclusion is significant. By placing grave goods with the deceased, mourners sought to add new variables to the identity of the deceased; emphasising their distinctiveness within the community and informing witnesses how they should interpret the deceased.[27] By contrast their exclusion may be viewed as a deliberate attempt to deny witnesses information as to the deceased, in particular the distinct nature of the individual within the community.

Of the MIA normative inhumations only 13.6% (N=12, 5.5% of all MIA inhumations) were recovered with grave goods. Grave goods from Suddern Farm consisted of only two items from two individuals (a ring and a brooch, respectively). By contrast, 45% (N=107) of LIA/ERIA normative inhumations were furnished with grave goods. Of the cremations of the same period 94% (N=206) were provided with grave goods. Although this figure may result from unfurnished graves having been missed during excavation,[28] it does appear that the vast majority of cremation graves were provisioned with grave goods.

At the same time we do detect similarities between the MIA and LIA/ERIA datasets.

In both cases sub-adults, between 2-18 years of age, are under-represented (MIA 13%, N=29; LIA/ERIA 8.7%, N=26). Likewise, adult men and women, albeit with variation according to sites, tend to be represented in approximately equal numbers. Thus, although individuality is apparent in the archaeological record, the individuals were permitted to retain their individuality accorded to earlier practices. It may be that the lack of cremated remains representing entire individuals (1,200g for an adult)[29] in cremation burials (mean of 204.5g for N=165 of dataset) represents a continuation of the MIA practices of depositing elements of excarnated bodies in other contexts.

In terms of placement of graves we may also detect continuity. Within Dorset, the LIA largest cemeteries, Maiden Castle (N=52) and Poundbury (N=49), were set within MIA hill-fort ramparts. At the site of Westhampnett, E. Sussex, the circular arrangement of the cemetery with its possible cosmological alignment echoes the spatial arrangement of an Iron Age roundhouse (Fig. 2). It has been demonstrated that these structures, which are very much a British and Irish form of architecture (although a few continental examples are also known),[30] have a cosmological alignment (Fig. 3).[31] Sharples[32] has suggested that such houses in the MIA were intended to last only as long as their occupants lived. Parker Pearson and Sharples[33] have suggested that spatial organisation within roundhouses was governed by age, with elder members occupying a position in line with the sunrise. This structuration, according to cosmology and age, is observed at Westhampnett, where elder members were positioned closer to the centre of the cemetery. A similar arrangement may also be observed at Mill Hill cemetery, which, based on the author's analysis of grave goods, expands in a southeasterly direction.

Although the number of individuals provided with grave goods increases, such grave goods occur within a restricted range. With the exception of the site of Owslebury, Hants[34] where some graves were provided with an excess of 10 vessels, most inhumations and

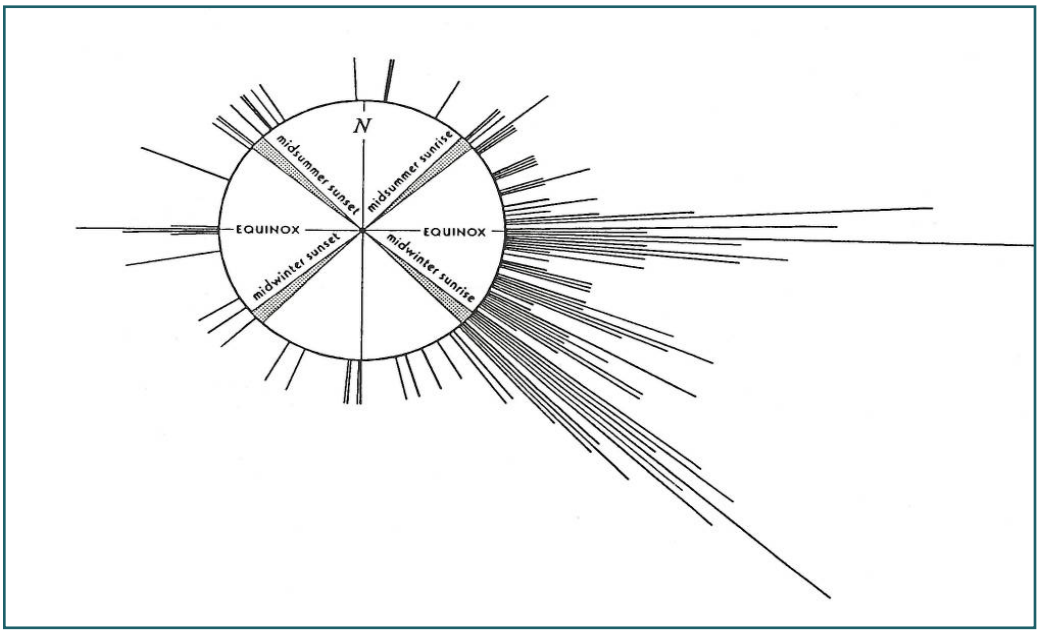

Figure 2: Theorised cosmological alignment of the Westhampnett cemetery. (Reproduced with permission of A.P. Fitzpatrick 1997b, fig. 137).

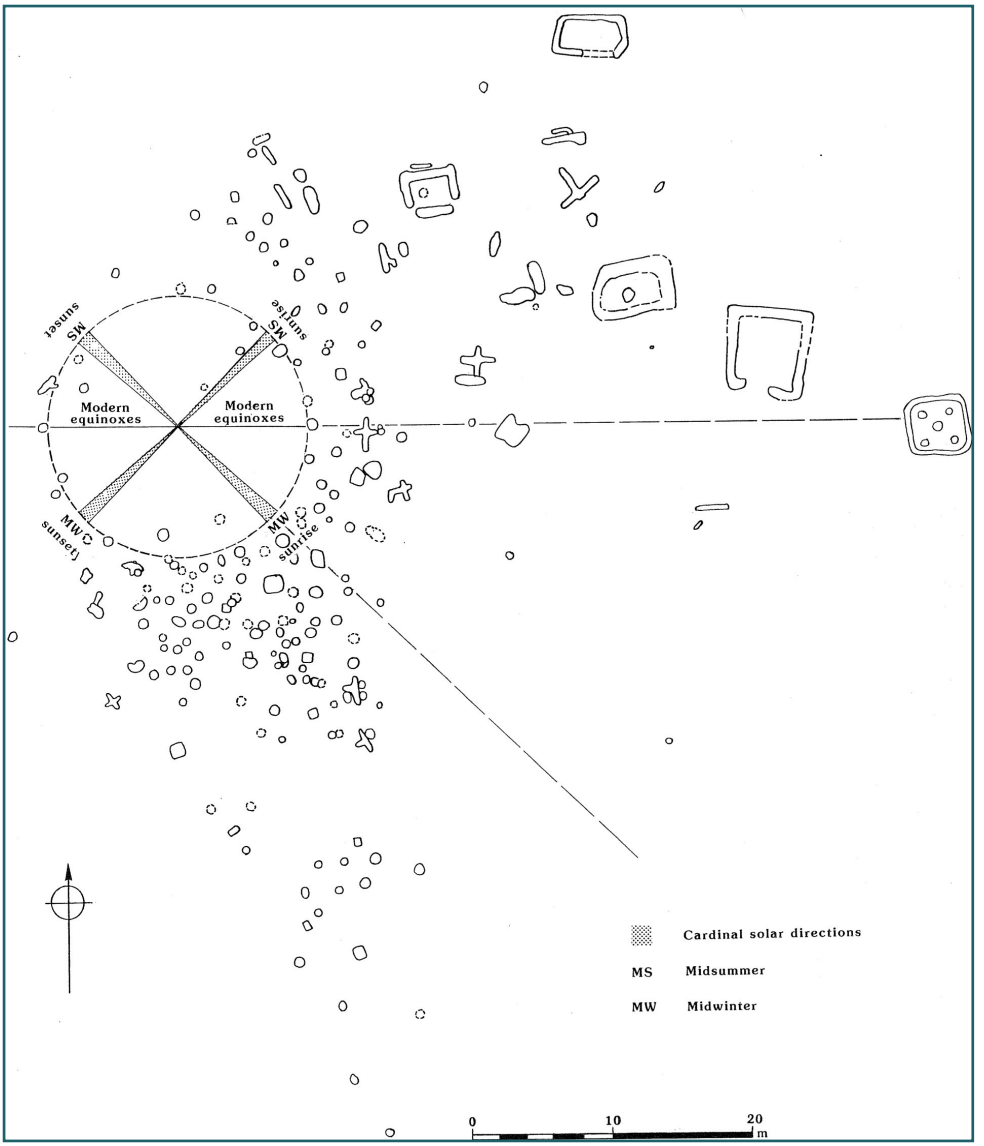

Figure 3: Cosmological alignments of Iron Age roundhouses in Britain. (Reproduced with permission of A. Oswald 1991, fig. 19)

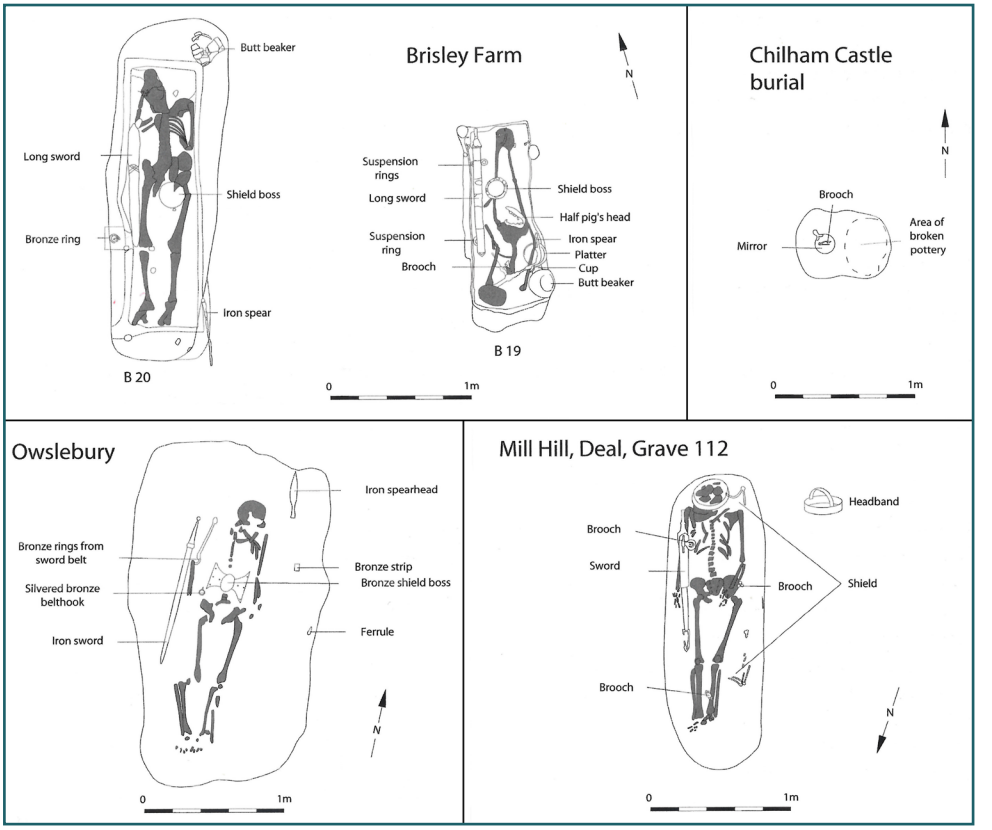

Figure 4: Weapon and mirror burials from the study area. (Reproduced with permission of S. Hamilton 2007, fig. 6).

cremations elsewhere received two to four ceramic vessels. A similar pattern is observed with brooches. 81% (N=68) of graves possessed a single brooch, and no grave contained more than three. This confirms past studies of grave good quantification among Aylesford-Swarling cremations,[35] and Durotrigian inhumations.[36] However it also demonstrates that cemeteries outside of these cultural zones, namely those of the West Country, likewise constrained access to grave goods. We are thus witnessing a combination of social personas,[37] and conveyance of messages. In the MIA mourners who did not know the deceased personally were provided with little information. In the LIA and ERIA a variety of variables surrounding the deceased were now communicated to witnesses. Some of the items interred may have been personal possessions used in life, such as the brooches, but others, such as the ceramics from the Westhampnett.[38]

The only exception to the above is a group of burials that were provisioned with weapons and/or mirrors, a tradition which is found elsewhere within southern Britain (Fig. 4 for examples).[39] Within the study area ten examples of weapon burials are known, of which eight were excavated and published to a sufficient degree to permit analysis. Such burials display an even distribution across the study area (Isles of Scilly/Cornwall N=1, Dorset N=2, Isle of Wight N=1, Hampshire N=2, W. Sussex N=1, Kent N=3). Four examples of mirror burials,

of which 4 examples are included in this study (Isles of Scilly/Cornwall N=1, Dorset N=1, Hampshire N=1, Kent N=1). As with the weapon burials they represent a rite found elsewhere in LIA Britain.

It is the weapon burials which are of greatest interest; displaying many characteristics that are not observed elsewhere in the dataset. Firstly, the Hampshire, Sussex and Kent examples do not subscribe to established cosmological conventions. In contrast to MIA and contemporary LIA/ERIA burials, the human remains are not in crouched positions on their sides (exempting the Bryher, Scilly and Whitcombe, Dorset example), but rather are extended and supine. Although they are orientated in accordance with established patterns for inhumations for their area, they acted as foundation burials, around which other, later burials were positioned. Indeed, at the site of Hayling Island, one such individual appears to have served as the focus for a Later Iron Age temple.[40] This association with religion is also found at the Mill Hill, Kent cemetery[41] where the individual was provided with what appears to have been religious regalia, and at Brisley Farm, Kent[42] where two weapon burials were the focus of subsequent acts of feasting. Secondly, the degree of variation observed in their grave goods, in particular the provisioning of weaponry, sets them apart from contemporary burials, with their restricted range and quantity of grave goods.

It has been argued[43] that this period witnessed the rise of warrior nobility, some of whom subsequently founded the dynasts which Roman writers record for LIA Britain. Alternatively, they may represent individuals associated with religious or ritual duties. Many of the weapons recovered from these graves were broken, a feature found on weapons included as votive offerings in river and at sanctuaries elsewhere in Britain and the continent. The headdresses recovered with the Mill Hill and North Bersted individuals were also ornate and impractical for warfare. Furthermore the Mill Hill and Bryher individuals were of very light build. Mirrors likewise, by virtue of their unique properties, may have been viewed as weapons of a sort also.[44] The possibility exists then that these burials represent a new class of individual who manipulated the existing cosmological and ritual framework of society by virtue of their religious occupation. They thus established themselves as rulers within their respective communities. The appearance of similar mirror and weapon burials elsewhere in Britain demonstrates that this was a form of rite restricted to elites, rather than based on local customs.

The Later Iron Age Atlantic Community

Contextualising this data against other datasets for this region, and within the broader area of Atlantic Europe (British Isles, Northern France, Western Iberia), we observe similar patterns. This period appears to have been one of population growth, facilitated by climatic improvements in the form of a warmer climate.[45] New technologies for food processing, such as the rotary query were introduced,[46] and improvements in crop management adopted.[47] Combined with the warmer climate this permitted an increase in agricultural output and probably population expansion. Combined with this is evidence for intensification of existing trade networks. It is likely that population growth, coupled with intensification of contacts between different regions, resulted in similar approaches to viewing the world, including disposal of the deceased, being adopted by these communities. Added to this is the possibility that some developments were introduced by population movements, for which there is increasing evidence in this part of the world. Examples include a likely the Durotrigian cemetery at Urville-Naqueville, Normandy[48] as well as a probable Gallic female at the British site Westhampnett.[49] Isotopic analysis also indicates the burial of non-local individuals among cemetery populations in southern Britain.[50]

Elsewhere in the British Isles, the LIA witnessed many communities that had formerly disposed of their dead by archaeologically

invisible means, adopt formalised burial rites. Comparable, contemporary inhumation burials and cemeteries to those in Dorset and Kent emerge in the Western[51] and Northern Isles[52] of Scotland and eastern Ireland[53] during this period. On the continent we find parallels to the developments in Britain. These include the long recognised links between the Aylesford-Swarling and north Gallic rites,[54] but also weapon burials, which are primarily located in in coastal regions and the Ardennes.[55] Although absent from the mortuary record, the adoption of larger swords, gold coinage and increased evidence for horses at settlements may attest to the presence of such individuals in the Lower Rhine.[56] The use of certain individuals as focal points for cemeteries is likewise attested to on the continent, as for example at Acy-Romance, Champagne-Ardennes.[57]

An increased emphasis on the individual may also be detected elsewhere in the form of new styles of anthropomorphic artwork. Compared to the Mediterranean world, human forms are not a common feature of the communities of Iron Age central Europe. However, they occur in sufficient quantity to suggest that anthropomorphism was not taboo. Examples include the bearded figures on flagons and discs of Jacobsthal's Early and Waldalgesheim phases of Celtic art,[58] and human faces on torcs and *Maskenfibeln*.[59] A small number of stone statues from south west Germany,[60] wooden and stone totems from the Swiss Plateau[61] and from rock art at Valcamonica, Italian Alps[62] also depict human forms. More common is the wide variety of Celtic coinage, which depicts human forms from c.250 B.C.E. onward.[63] By contrast, in Britain, such depictions are virtually unknown before 100 B.C.E. outside of Yorkshire (where a normative burial culture exists from the end of the fourth century B.C.E.) save for two wooden figurines from Argyllshire and Devon.[64] Although this may be a result of survival in the archaeological record, it is possible it stems from a deliberate avoidance of representing the human form. In much the same way that much of the population was disposed of in a way which left limited trace, and the few which were buried in a normative fashion lacking grave goods to convey messages. So the lack of anthropomorphic representation may be viewed as an attempt to erase or diminish representations of individuals.

During the LIA this apparent aversion to anthropomorphic representation changes, to an extent. Examples from within the study area include the semi-realistic depictions of human heads on the Aylesford bucket, Kent, and a bucket mount from Marlborough, Wiltshire. The LIA also witnessed the production of abstract, albeit still anthropomorphic artwork, such as the shield mounts from Wandsworth, Middlesex and Tal-y-Lyln, Gwynedd. This is also the period, which saw the introduction and adoption of coinage in Britain. Early coin issues (pre-50B.C.E.) depicted abstract portrayal of human heads. An increased interest in depicting human forms is also observed in contemporary communities on the Atlantic coast. Examples include the stone sculptures from the hill-fort at de Paule, Côtes-d'Armour[65] and around 20 second to first century B.C.E. anthropomorphic statues from Galicia and Portugal.[66]

Conclusion: New identities, old traditions

The changes we observe in the mortuary record for the LIA in this region of Britain appear to represent a new emphasis on the individual at the expense of the communal identity. In contrast to the MIA deposition practices where members of the community appear to join an undifferentiated community of the dead,[67] those of the LIA are permitted to remain as distinct individuals in death. This change coincides with other changes in the archaeological record at this time. These include a decline in the importance of communal centres such as hill-forts, a greater rate of deposition and production of material culture, and the adoption of new artefact and structure types, such as coinage and Gallic style temples.

This is not to argue for a complete separation with the past, as evidenced by the continued

use of older settlements, in particular those in the Durotrigian zone[68] as locations for cemeteries. Likewise it is possible to detect cosmological continuities, with a preference for easterly orientations observable in the cemetery layout of Westhampnett and Mill Deal, and in the orientation of Durotrigian burials. Not all members of the community are admitted to the new rites, with sub-adults under-represented in the burial record, while neonates and children continue to be deposited in non-funerary contexts. Furthermore, although grave goods are increasingly common during this period, they are not afforded to every member of the community. The majority of these individuals also appear to conform to a social persona, in that they are provided with a restricted range of items and typologies. This restricted range and, in some cases, lack of grave goods, and adherence to social personae, echoes the MIA lack of observable social stratigraphy. This range is also observed in the weight of cremation deposits, and it may be that this practice relates to the earlier practice of depositing disarticulated bones following excarnation.[69]

Only in the case of two classes of individual, the mirror and weapon burials, does this appear not to have been the case. It is argued that these individuals represent an inter-regional, if not-international class of individuals, a martial-religious identity. The location of the weapon burials in particular demonstrates that these were focal points for veneration, and it may be that these individuals are associated with the British dynasts that emerged during this period. Although the material culture associated with these burials is, in many cases, insular, they appear to belong to wider class of martial elites who existed in Iron Age Europe at this time.

This mention of Europe also brings us back to the point that the changes we observe in southern Britain at this time were not isolated developments. Just as with other aspects of the LIA archaeological record, the mortuary record of this region of Britain shares many parallels with Ireland and continental Europe. These range from the emergence of new, formal burial rites, to the use of founder burials around which to structure cemeteries. This appears to occur at a time when there is an increasing emphasis on portraying the individual in Atlantic Europe, as evidenced by the examples of anthropomorphic artwork from this region. The LIA in the Channel regions of Britain is therefore a time when the individual emerges as part of a broader international phenomenon. Nevertheless, the individual, although permitted to exist in the mortuary record, does so as part of a wider European Iron Age.

Endnotes:

1 Cunliffe 1975, 287; Collis 1977a, 8
2 Le Forestier 2009, 130
3 For example Wainwright 1979; Cunliffe 1984d, 1995a; Nowakowski 1991; Parfitt 1995; Fitzpatrick 1997b; Cunliffe and Poole 2000; Johns 2002-2003; Deeves 2007
4 after Hill 1999; Moore 2006; Haselgrove and Pope 2007
5 Selkirk 1981, 104; Bedwin and Holgate 1985, 241; Mattingly 2006, 91; Hamlin 2007
6 Wilson 1981; Wait 1985; Carr and Knüsel 1997; Hamlin 2007; Sharples 2010, 247-287
7 Redfern 2011, 118
8 Sharples 2010, 57
9 Hingley 1984b
10 Cunliffe 2005, 394, fig. 15.33
11 Ellison and Drewett 1971; Whimster 1981, 189; Wait 1985, 116; Roth 2011 , 20
12 Cunliffe 1991, 507
13 Child 1995; Carr and Knüsel 1997, 167; Lally 2008
14 Cunliffe 2005, 136
15 Whimster 37, 1981; Sharples 2010, 277
16 Parfitt 1995, 18-20; Garrow et al. 2009, table 2
17 Fitzpatrick 1997b
18 Hill 2011, 248
19 Haselgrove 1987; Creighton 2000, 64
20 Child 1995, 21
21 Nowakowski 1991, 225, fig 84
22 Whimster 1981b, 260
23 Whimster 1977, 77
24 Childe 1929
25 Binford 1971; Chapman 2013, 49
26 Ekengren 2013, 176
27 Giles 2012, 170-1
28 Seagar Thomas 2005, 86-7
29 McKinley 1993b
30 Dechezleprêtre and Ginoux 2002; Webley 2015, 130
31 Sharples 2010, 197-201, 235-7
32 Sharples 2010, 236
33 Parker Pearson and Sharples 1999
34 Collis 1968; 1970
35 Haselgrove 1982, 85-6; 1984, Table 1
36 Hamlin 2007
37 Binford 1971, 17
38 Mepham 1997, 134
39 Whimster 1981, 132; Johns 2002-2003, 67
40 King and Soffe 1998
41 Parfitt 1995
42 Johnson 2002
43 Creighton 2000, 31; Roymans 2004, 20
44 cf Johns 2003, 71; Giles 2012, 156
45 Fernandez Götz 2014, 135, Fig 5.6
46 Webley 2015, 127
47 Brun and Ruby 2008, 116-117
48 Lefort 2015
49 Brittain, forthcoming; Fitzpatrick 1997b, 236
50 McKinley et al. 2013; Webley 2015, 134
51 for example Macleod 2000; Neighbour et al. 2000; Murphy et al. 2004
52 Dawson and Lelong 2005
53 O'Brien 2003; McGarry 2008, 221
54 Cunliffe 2005, 151
55 Lejars 1998, 92, fig.91
56 Roymans 2004, 21
57 Lambot 1998, fig. 74
58 Megaw and Megaw 1989, 69-74
59 Megaw and Megaw 1989, 84-88
60 Megaw and Megaw, fig. 82 and 84
61 Kaenel 2012, 120-22
62 Fossati 1991, 92, fig. 75
63 cf Depeyrot 2013 for a recent overview
64 Cunliffe 2005, 574, fig. 20.21
65 Menez et al. 1999
66 González-Ruibal 2004
67 Sharples 1991, 87
68 Wheeler 1943; Farwell and Molleson 1993
69 Carr 2007, 444

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Being Roman, Writing Latin? Consumers of Latin inscriptions in Achaia

Rachel McCleery

Latin inscriptions provide our best evidence for explicit, intentional engagement with Roman culture in Greece. Although regional studies exist to supplement the major corpora, larger questions about the Latin epigraphy of Greece have been largely neglected. Who were the creators of these inscriptions and by whom were they intended to be read? What circumstances – factors influenced the decision to set up an inscription in Latin rather than in Greek?

This paper addresses these questions through quantitative analysis of the collection of 1165 Latin or bilingual Latin/Greek inscriptions from the province of Achaia documented in the Epigraphic Database Heidelberg. By identifying the provenience and general content of each inscription, I document patterns in the status of the author, the prospective audience, and the social, political, and/or religious context in which Latin inscriptions in Greece were consumed. Based on that analysis, I suggest a list of factors which contributed to the choice to use Latin, including personal identity, the degree and frequency of local interaction between native Latin and Greek speakers, and the civic status or ambitions of individual communities vis-à-vis their neighbors as well as within the larger Roman world.

Figure 1: Cities with Latin inscriptions in the Roman province of Achaia (modern Greece). Adapted from the Ancient World Mapping Center. "À-la-carte." http://awmc.unc.edu/awmc/applications/alacarte/ (Accessed 9 Nov. 2015.) Creative Commons CC BY-NC 3.0 license.

Introduction

Latin inscriptions in Greece have, on the whole, suffered from the traditional separation between Greek and Latin studies. Although valuable site-specific and small regional studies of Latin inscriptions exist, none of these are broadly comparative works. Apart from the major corpora, in fact, there has been only one study of the Latin epigraphy of the province of Achaia (see Fig. 1)[1] as a distinct field.[2] This neglect of the Latin epigraphy has persisted despite a steady trickle of scholarship dedicated to Roman Greece.[3]

Yet an examination of the total corpus of Latin inscriptions from Achaia reveals significant patterns. The thematic content of these inscriptions, their general archaeological context, and their degree of bilingualism varies from place to place. Although some of this variation can be explained by inconsistent standards of excavation and publication, marked differences remain among the four best-represented cities (Corinth, Patras, Athens, and Delos). These differences – especially between the early material at Delos and the later Roman colonies of Corinth and Patras – show shifts in the use of Latin that reflect the changing nature and extent of Roman power in Achaia.

Language and Cultural Engagement

Apart from the Latin inscriptions themselves, we have no means of determining the frequency with which Latin was employed in Achaia. Those who commissioned the inscriptions may or may not have spoken Latin themselves; a translator could as easily have produced each text. The presence of Latin is thus better evidence for an inscription's intended audience than it is for the linguistic knowledge of the person(s) who commissioned it.

Unlike most objects of material culture, a language can only be useful for those who are conscious of its origins. In order to interpret the use of any other artifact as evidence of deliberate cultural engagement, archaeologists must assume cultural knowledge on the part of an artifact's user. This is not self-evident. Roman pottery might be used because it

was cheaper or better made; the adoption of Roman architectural forms could be an aesthetic or functional choice as easily as one reflecting deliberate cultural engagement.[4] For this reason, Latin inscriptions provide our best evidence for explicit, intentional engagement with Roman culture in Greece.

Dataset: The Epigraphic Database Heidelberg (EDH) [5]

Only recently has the development of electronic databases made it feasible to study all of the inscriptions of a province quantitatively, based on previously published data. For this project, I consulted the Epigraphische Datenbank Heidelberg (EDH), a database whose stated purpose is "the systematic entry of ancient Latin and bilingual (usually Latin and Greek) inscriptions."[6] Despite certain limitations, the EDH is currently the only tool available for sorting published Latin inscriptions chronologically or geographically by city.[7]

Geographical distribution

Only 1165 of the 1277 "Latin" inscriptions documented from Achaia[8] actually contain any Latin.[9] I have excluded from this study the 112 inscriptions written solely in Greek, since there is no clear reason why these Greek inscriptions have been included out of the many thousands extant.[10] When these are eliminated, 58 cities[11] are represented by either Latin or bilingual[12] inscriptions, but with a great deal of variation in the number of inscriptions found at each.

As shown in Figure 2, a disproportionate number of cities are represented by only a handful of inscriptions; 44 cities, in fact, have three or fewer.[13] Four cities – Delos, Athens, Patras, and Corinth – account for 86% (1001) of the total number of published Latin or bilingual inscriptions from Achaia. Corinth alone provides over half of the total.[14] This distribution pattern remains roughly the same even when short and/or fragmentary inscriptions[15] are removed to compensate for uneven publication (Fig. 3).[16]

Notably, the city of Argos and the sanctuaries of Olympia, Delphi, and Eleusis – locations with excavation and publication records similar to those at Delos, Athens, and Corinth – have far fewer Latin inscriptions.[17] This suggests that the greater number of Latin inscriptions found in Delos, Athens, Patras, and Corinth does represent a real pattern. Since most extensive excavation in Greece has taken place at the most famous sites of antiquity, however,

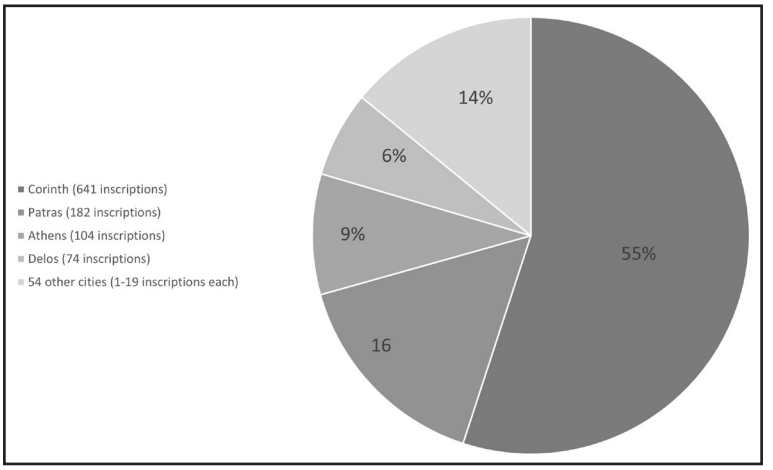


Figure 2: Geographical distribution of all 1165 inscriptions by city.

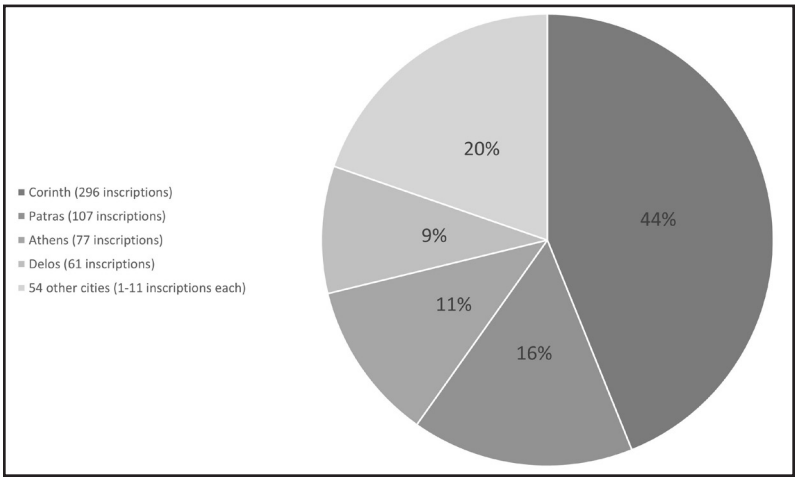


Figure 3: Geographical distribution of the 674 inscriptions with more than 10 preserved or restored letters.

the extent to which the data accurately reflect reality in smaller, lesser-known cities remains unknown.

Chronological Distribution

Only 541 inscriptions (46%) in the EDH include any information on their date. Figure 4 represents the chronological range of each of the 541 inscriptions as a bar, with the resulting bars arranged on a timeline by their midpoints; the greater the height of the shaded area, the more inscriptions have been dated to that range. Figure 5 shows the same information plotted by measuring the number of inscriptions which share a midpoint for their chronological range within the same five-year span. The shaded area illustrates the general bell curve formed by this data. Generally speaking, the frequency with which Latin inscriptions are found by date matches up well with other evidence for a peak of Roman power and prosperity in the second century C.E.[18]

Archaeological Context

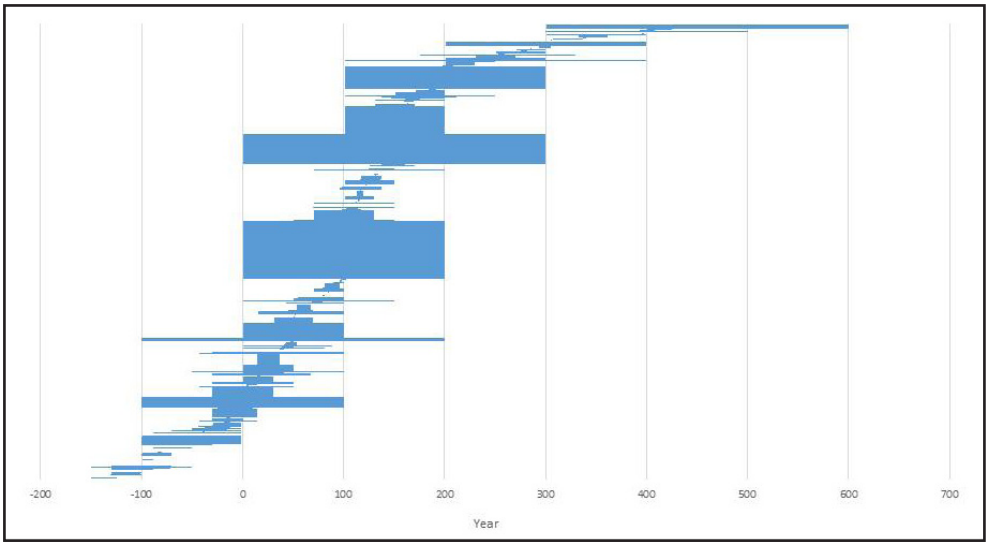
The state of our information about the more detailed archaeological provenience of Latin inscriptions leaves much to be desired, even at the most well-published sites. With the exception of many epitaphs, most of the stones or objects were separated from their original context long prior to their modern discovery and documentation.[19] In most cases, our best evidence for the original context of an inscription comes from the form of the object itself.

Forms

Of the 1165 total inscriptions in the EDH, 881 (76%) include at least some information about the object on which they were found. These 17 different forms are listed in Table 1 (see Appendix). The most common form is the *tabula*[20] (Fig. 6) with 376 examples (43%) from 22 different cities. Unfortunately, *tabula* in the EDH can refer to anything in the form of an upright slab up to approximately 20 cm thick, including architectural revetments.[21] In theory, a *tabula* is supposed to be distinguished from a *stele* (80 examples, 17 sites), which is free-standing.[22] In practice, the EDH relies on the original publications in order to classify fragmentary stones, which makes statistics about those forms unreliable.[23] Furthermore, the lack of systematic entry of stamped lamps or amphoras (grouped together with similar objects under the heading *instrumentum domesticum*, or household equipment) means that such objects are vastly underrepresented in the EDH.[24]

If *tabulae* and household equipment are excluded, however, the remaining items can be classed as either architectural or free-standing.[25]

Figure 4: Chronological range of dated inscriptions. Negative numbers represent dates B.C.E.



Architectural forms (240) and free-standing forms (236) are represented about equally across the province. When broken down by city, however, 191 (80%) of the architectural forms come from Corinth. In order to understand this disparity, we must examine the both the content of the inscriptions and the historical differences between cities more closely.

Content of inscriptions by city

Out of the 1165 total inscriptions, 713 (61%)[26] have been assigned to one of the various categories defined by the EDH, as shown in Figure 7 (see also Table 2 in Appendix).[27] Once these categories have been standardized,[28] interesting variations appear among the four cities with enough inscriptions to make a meaningful comparison. The leading category of inscriptions overall is the epitaph (funerary inscription), with 239 examples (34%). Honorific (in honor of an individual) and votive (recording a dedication to a god) inscriptions are in second and third place, with 181 (25%) and 83 (12%), respectively.[29] Overall, only 87 out of 713 categorized inscriptions (12%) are in any way bilingual.[30] As we shall see, however, individual cities diverge remarkably from the average.

Delos

Delos's peculiar history as a sacred site dedicated to Apollo and as a free port frequented by Italian as well as Greek traders makes its epigraphical record unique.[31] Its inscriptions are also far earlier than the majority of the material from any other site.[32] Out of the 49 Latin or bilingual inscriptions that have been categorized by the EDH, almost half (24) are votive in nature. Honorific inscriptions are the second most common with nine examples (18%), followed by building inscriptions with five (10%). There are no epitaphs.[33] In addition, over half (26) of the inscriptions from Delos which can be characterized by type are bilingual to some degree. Latin precedes Greek on these stones in all but three cases, and the Greek normally repeats the Latin text with little to no variation.

HD030141 is a typical example of this bilingualism[34]:

A(ulum) Terentium A(uli) f(ilium) Varro[nem legatum]
Italicei et Graecei quei Delei negoti[antur]

[A]ὖλον Τερέντιον Αὔλου υἱὸν Οὐ[άρρωνα πρεσβευτὴν]
[Ρ]ωμαίων Ἰταλικοὶ καὶ Ἕλληνες οἱ κατ[οικοῦντες ἐν Δήλωι]

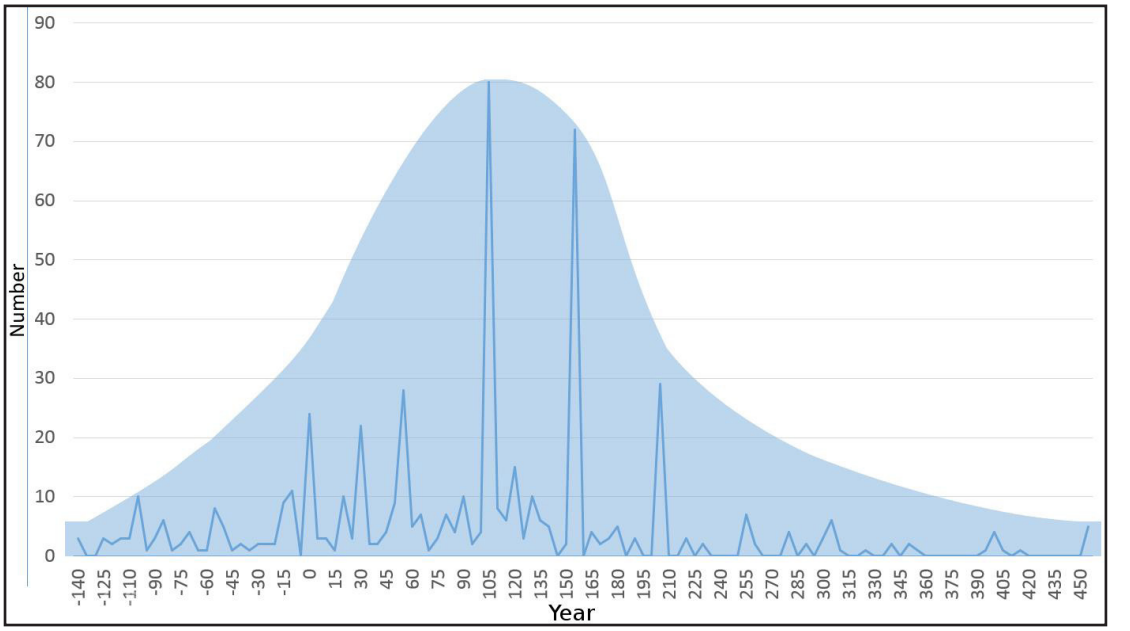


Figure 5: Number of inscriptions charted by the midpoint of their chronological range. Negative numbers represent dates B.C.E.

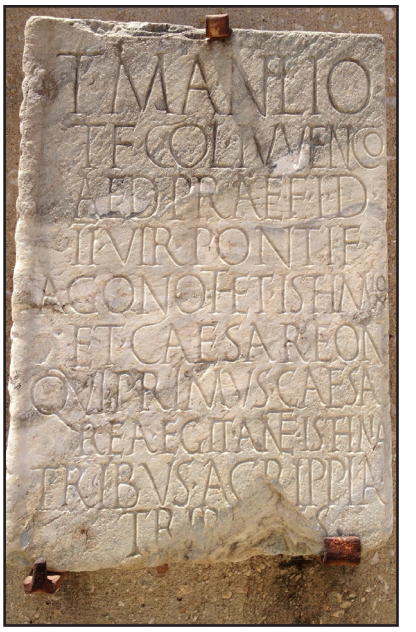


Figure 6: A tabula (HD026566) with an inscription in honor of Titus Manlius Juvencus, on display in the Archaeological Museum of Ancient Corinth, May 2014. The metal brackets are not original. Photo by author.

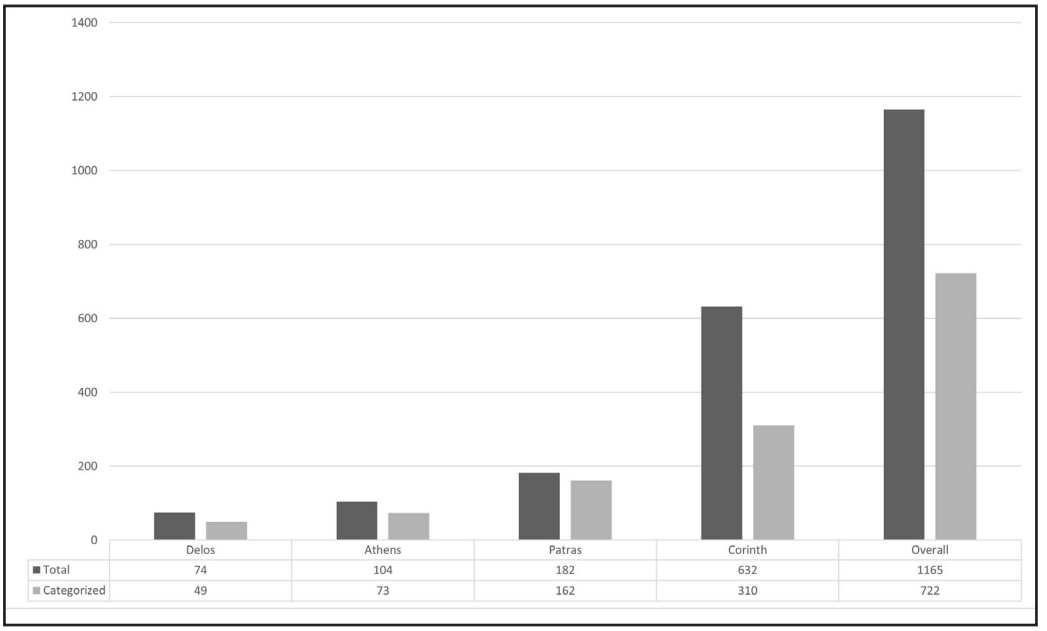


Figure 7: Inscriptions categorized in the EDH.

From this and similar examples, it would seem that writers of these early inscriptions composed inscriptions primarily in Latin, adding Greek as a way to widen their prospective audience. In fact, since many of the inscriptions consist mainly of a list of names which are simply transliterated into Greek, it appears the authors assumed a basic unfamiliarity not only with Latin as a language, but with the Roman alphabet.[35] Without exception, a Roman or Italian is involved either as one of the dedicators or the person to whom the community expresses its gratitude;[36] there are no Latin inscriptions dedicated to and written by only Greek individuals.

In content, the Latin inscriptions of Delos are concerned almost exclusively with local self-promotion and commemoration: giving proper credit to individuals for gifts of infrastructure or other aid to the local business community[37] and/or to the gods. The religious dedications in particular affirmed the religious practices and piety that Italians shared with other traders on Delos, while reminding the viewer of their distinct ethnic identity; they became in effect pieces of ethnic propaganda in addition to their religious significance.[38] On Delos, then, Latin was used primarily by Italians to promote their interests and those of their community while marking them as an ethnically or culturally distinct group.

Athens

The picture at Athens is rather different. Out of the 73 categorized Latin or bilingual inscriptions, epitaphs predominate with 34 examples (47%), followed by honorific inscriptions with 15 (21%) and dedications to the emperor with 10 (14%). Only 21 (29%) of the inscriptions are bilingual, compared to the rate of 53% at Delos. Even so, this rate of bilingualism is still higher than the average for the province (12%).

Out of the 34 epitaphs, at least 15 come from the tombs of Roman soldiers. Eight (24%) of the total number of epitaphs are bilingual to any degree, but this percentage drops to 13% when looking at the subset of epitaphs for

Roman soldiers, with only two examples out of 15. Moreover, the "Greek" of one of these two is simply Latin written in Greek letters.[39] This suggests a relatively low degree of concern about whether or not viewers without Latin could understand an epitaph, especially among soldiers. While the specialized genre and vocabulary of military funeral inscriptions offers one explanation for this neglect of Greek, I suggest the prospective audience is the more important factor: the authors intended to speak to other Roman soldiers rather than to the casual passerby. Only another soldier could understand the experience recorded by the formulaic phrase, "*militavit annis X*" (he was a soldier for 10 years),[40] and only another soldier was likely to care which unit the deceased had been part of.

In Athens, we also have two examples of Latin inscriptions being commissioned by non-native Latin speakers.[41] One is an inscription honoring the emperor Hadrian; the other is addressed to an early proconsul of Achaia.[42] Both contain the name and various titles of the Roman individual in Latin, followed by a further text in Greek[43] which attributes the dedication to the council of the Areopagus, the *boule* (council), and the *demos* (people) of Athens.[44] In these examples, the use of Latin must reflect the desire of the Athenians for the inscriptions to be understood by native Latin speakers - presumably the honorees themselves as well as any other visiting Romans whose goodwill it might have been helpful to cultivate.[45]

An additional four inscriptions found at Athens shed light on differences between the Latin epigraphy of Athens and that of other cities in the province – most notably Corinth. The series consists of statue bases dedicated in honor of Hadrian by other cities in the Eastern Mediterranean at the time of the foundation of the Panhellenion.[46] Alongside others written in Greek were those of the Roman colonies of Dion in Macedonia, Philippi, the Troad, and Pisidian Antioch.[47] Although the lower portion of the inscription is missing for both Philippi and Antioch, it is likely that all four followed the pattern established by the Troad and Dion: a Latin text followed by the Greek name of the community responsible for its dedication at the bottom on a separate line. In these examples, Latin appears as the language of choice and Athens as the preferred site of international display. Each city underlined its status as a Roman colony by using Latin and increased the visibility of its dedication by leaving it at Athens, the new headquarters of Hadrian's international league.

Patras

The epigraphic record of Patras has been shaped by the absence of large-scale excavations in the heart of the ancient city; most of the archaeological evidence instead comes from rescue excavations conducted on its outskirts since the 1970s. Accordingly, out of the 162 inscriptions categorized in the EDH, 124 (77%) are epitaphs. The next most common types are honorific inscriptions with 13 examples (8%) and votive with 10 (6%). Only two (1%) of the categorized inscriptions from Patras (both epitaphs) are bilingual in any way, and in each instance the Greek text appears completely unrelated to the Latin.[48]

The status of Patras as a Roman colony no doubt influenced this use of Latin in isolation from Greek at the site. These Roman colonists did not replace the older Greek population of the city, but supplemented it.[49] Unlike at Athens or Delos, however, the authors of Latin inscriptions seem unconcerned about whether those inscriptions were intelligible to Greek-speakers. This suggests that the Roman colony at Patras, with its westward-facing port, retained closer and more all-encompassing cultural and linguistic ties to Italy than either Delos or Athens.[50] Either the population of Greek-speakers who did not know Latin was low enough not to cause worries about intelligibility, or people lacking knowledge of Latin were not seen as a desirable audience. In either event, the colonists saw no need to make linguistic concessions; their use of Latin by itself in a multi-ethnic city reflected their well-established political and social status.

Corinth

At Corinth, the sheer number of inscriptions is partly balanced out by their fragmentary nature. While Corinth accounts for 55% of the inscriptions in the EDH overall, it comprises only 43% of the categorized inscriptions. Of these, honorific inscriptions are the most common, with 133 examples (42%). The next three categories are dedications to an emperor, building inscriptions, and epitaphs, which are represented almost equally at 47, 45, and 45 examples respectively (ca. 15% each). Votive inscriptions not dealing with the imperial cult come in fifth place with 25 instances (8%). As at Patras, the rate of bilingualism in inscriptions from Corinth is very low, with Greek featuring alongside Latin in only nine out of the 310 categorized inscriptions (3%). Moreover, the extent of the bilingualism in these cases is quite limited.[51]

As the provincial capital, Corinth was the obvious choice of location for displays that honored provincial benefactors; such inscriptions are thus more common at Corinth than at any other site. The rationale for using Latin in these honorific inscriptions is also clear, since most refer to proconsuls or other individuals intimately associated with the Roman administration of the province.[52] Corinth's status as a Roman colony, however, also guaranteed the use of Latin for local commemorations[53] – at least early on.[54] Recipients of an honorific inscription at Corinth are just as frequently local magnates as they are provincial administrators, and members of both groups regularly receive dedications *decreto decurionum* (by decree of the local government).[55] At Athens, by contrast, no purely local officials are commended in Latin; the only honorific inscriptions which preserve the *cursus honorum* (list of offices held) of the honoree are dedicated to men whose offices extended beyond the province of Achaia.[56]

Finally, as discussed above, 80% of the Latin inscriptions from Achaia on architectural objects[57] are found in Corinth. As the provincial capital, Corinth's built landscape was greatly transformed in the Roman period. The appearance of Roman-style podium temples in the forum, the renovations to the South Stoa, the construction of the Julian Basilica (among many other buildings),[58] and the centuriation[59] of the surrounding countryside all bear witness to a city remade in a Roman image. Extensive and on-going excavations in the city center have revealed the inscriptions which accompanied this building activity. Further work in the center of Patras may reveal similarities between the two colonies; until then, the material from Corinth remains unparalleled within the province.

Conclusion

The factors contributing to the appearance of Latin in inscriptions in Achaia were many and varied significantly both between sites and over time. Early Latin inscriptions drew attention to the ethnic identity of the persons responsible for setting them up. Bilingual inscriptions on Delos advertised the benefactions not only of individuals but of Latin speakers as a distinct group within a larger multicultural population. The high percentage of votive inscriptions in Latin from Delos suggests that religious devotion provided a way for Latin speakers to promote the goodwill and generosity of their particular cultural group within a pluralistic society, while simultaneously affirming the religious practices and piety they shared with prospective international business partners.

The transformation of Achaia into a Roman province caused a shift in the use of Latin in inscriptions. In particular, Corinth and Patras used Latin in their public documents with only very rare concessions to the possibility that a reader without knowledge of Latin might wish to understand what an inscription said. This exclusivity is particularly striking when compared to the widespread bilingualism of the previous era on Delos. Greek and Latin continued to be used together, however, on the few Latin or bilingual inscriptions we have that were certainly set up by Greek communities.

It seems the expansion of Roman *imperium* (power) to Greece eliminated the spirit of intercultural competition that had once motivated the inhabitants of Delos to translate over half of their inscriptions to reach the widest possible audience. Under Roman rule, the ultimate message of any Latin inscription could be read with no need for actual intelligibility: with Roman domination an accomplished fact, the choice to use Latin in Greece became a sign of alignment with the new political order.

Endnotes:

1 The Roman province of Achaia included the southern portion of mainland Greece as well as a number of the surrounding islands. See Figure 1.
2 Šašel Kos 1977. Rochette 1997 provides an invaluable study of the use of Latin in the Greek-speaking world, but the vast scope of the project obscures variations at the level of individual provinces such as Achaia.
3 Alcock 1993, for instance, is based primarily on comparative survey data, with inscriptions of any kind appearing only as incidental historical evidence. Thus the words "epigraphy," "inscription," and "Latin" do not even appear in the index, though individual inscriptions are cited with some frequency throughout the text. Other recent publications on aspects of Roman Greece include Gregory 1994, Hoff and Rotroff 1997, Rizakis et al. 2001, Rizakis and Zoubaki 2004, Rizakis and Lepenioti 2010, Camia 2011, Spawforth 2012, and Di Napoli 2013.
4 An extensive body of literature has addressed the question of the relationship between material culture and identity formation in the Roman world in recent years. See e.g., Millett 1990, Mattingly 1997, Woolf 1998, Hingley 2005, Mattingly 2006, Revell 2009.
5 For the sake of simplicity, all individual inscriptions are cited below according to the numbers assigned in the Epigraphic Database Heidelberg (EDH). The EDH's entry for each inscription contains full references to the standard corpora.
6 EDH 2015, http://edh-www.adw.uni-heidelberg.de/projekt/konzept.
7 The abbreviated format of the EDH's search results is its largest working drawback. The only way to access the full entries for multiple inscriptions simultaneously is to open them in separate browser windows, which makes it difficult to view or compare more than a handful of inscriptions at a time. The wide range of information included as searchable fields in each entry, however, distinguishes the EDH from other epigraphical resources. For instance, the widely-used Packard Humanities Institute database (http://epigraphy.packhum.org/) covers Greek inscriptions, but is organized geographically by region and only the text of each inscription can be searched; users must refer to widely scattered original publications in order to find any information on archaeological context or even the form of the monument on which an inscription appears. In the absence of a resource equivalent to the EDH for Greek inscriptions, the task of comparing Latin inscriptions to their Greek counterparts at the level of the province would be the work of many years.
8 1261 inscriptions were listed from Achaia when I began. An additional 17 inscriptions from Athens were added on 13 October 2015 and all numbers given below reflect this most recent data. The EDH count is therefore 1279, but a single inscription from Pharsalus (EDH HD064147, 24 Oct. 2011) is listed among the inscriptions from Achaia, and should be numbered with those from Macedonia

instead. Similarly, a lone inscription from Kos (EDH HD019418, 7 July 2014) should be grouped with those from Asia. I have eliminated both from all calculations below.

9 Many of the Greek inscriptions include Roman names; these are, however, transliterated in every case and thus out of place in a study on the use of Latin in Greece.

10 The stated goal of the EDH is eventually, through its confederation with EAGLE (Electronic Archives of Greek and Latin Epigraphy), "to make all Latin and Greek inscriptions from Antiquity available on the Internet in a standardised [sic] system of criteria" (2015, http://edh-www.adw.uni-heidelberg.de/projekt/konzept). The entry of Greek inscriptions is still, however, clearly considered secondary and is far from systematic; the EDH lists the work status of Achaia as "fully entered" although these 111 are the only Greek inscriptions so far included in the database.

11 Out of the 56 ancient settlements or cities originally listed in the EDH, only Greek inscriptions are found at Elis, Naryka, Oenoe, and Sphettos, and I have thus omitted those four cities from study. An additional six of the bilingual or Latin inscriptions were isolated finds which could not be assigned to a known ancient settlement. In the figures and discussion, I have treated these six as if each were from a different (unknown) city. In the tables, I have listed them together under "Unknown."

12 Bilingual inscriptions, but no purely Latin inscriptions, are found at Anthedon, Gytheum, Kephallenia, Lebadeia, Pholegandrus, and Thespiae.

13 26 cities have only one known Latin inscription, 10 cities have two, and eight cities have three; the remaining numbers do not cluster.

14 The predominance of Corinth may be even greater than these numbers suggest, since the volumes of the Corinth series dedicated to the epigraphy of the city (Merritt 1931, West 1931, and Kent 1966) cover only inscriptions found in the excavations through 1950. In contrast to the 580 inscriptions published in the Corinth volumes through 1950 and included in the EDH, only another 61 published piecemeal after that date are known to the editors of the EDH. See also Kent's discussion (1966, 214) of the 653 fragments which he did not edit. Including this unpublished material from Corinth would worsen the situation considerably.

15 The great number of short or fragmentary inscriptions recorded from Corinth and Patras has a large impact on the data. Although the average number of preserved and/or plausibly restored letters per inscription at Corinth is around 25, the median number of letters is only nine; the situation at Patras is similar, though not as extreme (average of 30, median of 17). Athens (average of 76, median of 30) and Delos (average of 105, median of 37.5) are both closer to the norm for the rest of the province when Corinth and Patras are excluded (average of 103, median of 37). That this fragmentary material has been included in the EDH at all is due more to the quality of the publications from Corinth and Patras than the stated standards of the project. According to those standards (EDH 2015, http://edh-www.adw.uni-heidelberg.de/inhalt/einfacheSuche), "Excluded from systematic entry are Military diplomas, instrumentum domesticum (tile stamps) as well as very fragmentary remains of inscriptions."

16 The Latin inscriptions from Corinth and Patras have been more systematically published than those of other cities. Dedicated volumes on their epigraphy have allowed scholars to record fragmentary material that has not always merited publication at other sites. This becomes especially clear in the case of Corinth, where inscriptions of all periods are notorious for their poor state of preservation. Thus in the judgment of Kent (1966, 17), "the quality [of the Corinthian inscriptions] is as disappointing as the quantity is satisfactory, for it is difficult to think of any other ancient site where the inscriptions are so cruelly mutilated and broken." Kent (1966, 17-8) goes on to suggest that this poor state of preservation can be explained by a combination of earthquakes and deliberate destruction at the hands of the Herulians and the Goths.

17 When inscriptions with fewer than 10 preserved or restored letters are excluded, Argos and Delphi have 10 inscriptions each, Olympia has six, and Eleusis has five.

18 Since many inscriptions are dated within a very broad chronological range, however, this correspondence is not terribly compelling. In the absence of stratigraphic context (see discussion below) or internal textual evidence (e.g. names of known individuals), the only criterion for dating inscriptions is the style of their letter-forms. This makes it difficult if not impossible to narrow down the chronological range. Out of the 182 inscriptions from Patras, for example, 89 could only be dated to within a 200-year span.

19 As Kent concluded regarding the finds from Corinth, "the great majority of the stones were found in disturbed fill, and therefore their provenience means little or nothing" (1966, v.; cf. 17-18). For a similar evaluation of the material from Patras, see Rizakis 1998.

20 Although tabula is Latin for plank, notice board, or writing tablet, it is used in the EDH as a technical term rather than as a label which Latin speakers would have recognized. The EDH's translation of the German equivalent ("Tafel") for its English-language results is also inconsistent; most inscriptions in the English search results are, accordingly, listed under the Latin tabula while others (HD020800, HD030144, and HD056361) are "tables."

21 The EDH lists specific criteria for defining each of its forms (2015, http://edh-www.adw.uni-heidelberg.de/hilfe/liste/inschriftgattung), but these are unevenly applied. For instance, although HD026238 is listed as a "block," it ought to be classed as a *tabula* according to the criteria for thickness and orientation.

22 *Stele* (pl. *stelai*) is Greek for a block or slab of stone,

monument, or boundary post. Like *tabula*, it is used here in a technical sense to refer to an upright, free-standing slab.

23 At Corinth, for instance, only two Latin inscriptions, both epitaphs, are listed in the EDH as stelai (HD004306 and HD060240). Neither of these were published in the two Corinth volumes which deal with Latin inscriptions. In fact, the term *stele* is applied to monuments only twice in those volumes – and then in reference to two Greek gravestones (Kent 1966, 11, no. 36 and 183, no. 567). Compare this to Meritt 1931, wherein the term is applied to 41 different monuments (37 of which are gravestones). Either only two potential *stelai* were found at Corinth between 1926-1950 out of 1600 fragments of Greek or Latin inscriptions, or the editors made a deliberate choice to avoid the Greek term *stele*, preferring the more general "plaques" or "slabs." A standardized classificatory system for this material across sites and time periods would be most helpful, but is currently out of reach.

24 Athens is the only city at which stamps on amphoras have been included in the EDH, despite the frequency with which stamped amphoras have been recorded across the eastern Mediterranean.

25 Architectural members, blocks, tiles, paving stones, and tesserae (parts of mosaics) all depend upon the existence of a larger built structure of which they form a part. Bases, *stelai*, statue bases, milestones, inscriptions on cliffs, altars, grave monuments, honorific or votive columns, sarcophagi, and *cippi* (small, low pillars), on the other hand, exist independently of a larger built structure.

26 All other percentages throughout this section refer to the subset of categorized inscriptions, either overall or at an individual city. The EDH count of categorized inscriptions is 722 (62%). Since Athens is the only site where stamped amphoras are counted among the categorized inscriptions, however, I have removed those nine examples from the analysis.

27 Categories of inscriptions from Achaia are listed in Table 2, following those in the EDH (2015, http://edh-www.adw.uni-heidelberg.de/hilfe/liste/inschriftgattung).

28 Some irregularities have crept in. For example, all inscriptions from Kent 1966 which mention a Roman emperor in a case other than the genitive are classed as "votive" in the EDH, while those from West 1931 and other publications receive a more ambiguous (if any) classification. Compare, e.g., HD055655 and HD060353. For consistency in the tables, I have designated these as "imperial honorific" – that is, dedications in honor of the Roman emperor.

29 Preliminary comparisons with Rome and the surrounding region of Latium can only be tentative since the work status for those areas is incomplete, but the frequencies of the types are similar. Epitaphs lead with 59% of the categorized inscriptions, while 18% are honorific. Only 4% are votive. There are more building/dedicatory inscriptions, however, at 7% of the categorized inscriptions.

30 This represents something closer to the actual rate of Latin-Greek bilingualism in inscriptions than the raw numbers in the EDH, since the inscriptions that could be categorized are on average more completely preserved. The raw data from the EDH would suggest a lower rate of bilingualism of 9%, or 106 out of 1165 documented inscriptions, but fragments that could not be categorized may also not be well enough preserved to show whether or not they were originally bilingual.

31 Rome declared Delos a free port in 167 B.C.E., which led to unprecedented economic growth and development on the island as foreign traders from all over the Mediterranean moved in to take advantage of the island's duty-free status. See Polyb. 30.31.12 with Walbank 1979 (III.458-60), Strabo 10.5.4 and 14.5.2, Paus. 3.23.3.

32 All but one of the dated examples come from the first or second centuries B.C.E. After various military and economic set-backs in the mid-first century B.C.E., Delos's prosperity and economic importance significantly declined, although the island seems not to have been totally abandoned until late antiquity. Bruneau (1968, 688-707) assembles the archaeological and epigraphical evidence for this time period.

33 Delos was famously cleansed of prior burials on two occasions centuries earlier, as recounted by Thucydides (1.8; 3.104). The prohibition against burial on the island seems to have remained in effect for the remainder of antiquity. The phenomenon has been discussed by, among others, Schacter 1999 and Long 1958.

34 Image available in EDH entry. The text reads, "Aulus Terentius Varro, son of Aulus, legate / The Italians and Greeks who do business on Delos [set this up]. // Aulus Terentius Varro, son of Aulus, legate / of the Romans. The Italians and Greeks situated on Delos [set this up]."

35 This is true for the majority of the votive inscriptions, a typical example of which is HD019175. Both the Latin and the Greek consist of a list of the same names, in the same order. The Latin ends with, "…magistrates, for Mercury and Maia." The Greek concludes with more specificity, "…the Hermaistai, set [this] up for Hermes and Maia." The inscription is carved on a marble tabula or plaque on a large base near the south corner of the Stoa of Philip.

36 There is only one clear example from Delos in which non-native speakers (two individuals from the Greek island of Melos, in this case) are responsible for commissioning an inscription containing Latin: HD056819 (a dedication to Apollo made in honor of a Roman).

37 This business community is invoked by the repeated phrase, "*Italicei et Graecei quei Deli negotiantur*" (the Italians and Greeks who do business at Delos).

38 Rauh 1993 argues for the importance of religion in commercial dealings at Delos.

39 see HD019460. The text reads, (Titus Fabius Arnensis Pudes, son of Titus, a soldier of the faithful loyal Claudian 11th legion, served 7 years, [lived?] 27 years[…] Julius, his relative and heir, the centurion,

took care of making (this)). The transliteration of Latin into Greek script is a fascinating choice. It seems the author expected at least some of his intended readers to have an aural comprehension of Latin, but unfamiliarity with Latin script. The most likely audience is other Roman soldiers recruited from the eastern provinces, whose literacy might extend to a knowledge of the Greek alphabet but not the Latin. Oliver (1941, 244-6) discusses this inscription and collects four additional examples of Latin written in Greek letters from Egypt and Palestine.

40 HD048602. This is one of the standard formulae for discussing length of service; the other is the abbreviation STIP for *stipendiorum* (military pay or service). The full text of this typical example reads, "*D(is) M(anibus) / T(itus) Flavius Maximus / mil(es) cl(assis) pr(aetoriae) Misen(ensis) / milit(avit) annis X vix(it) / annis XXX / natione / Ponticus*" (To the spirits of the dead. Titus Flavius Maximus, a soldier from the praetorian fleet of Misenum, was a soldier for 10 years, lived 30 years, by birth from Pontus). Most of the Roman military epitaphs follow a pattern commonly seen in the genre across the empire. Standard information includes the name of the deceased, his age at death, his length of service, often the unit in which he served, and occasionally other details (e.g. the nationality of the deceased, the name of the person responsible for erecting the epitaph). These epitaphs could be written in Latin, but are also frequently found in Greek in the east.

41 The only parallels to this use of Latin by a Greek community in Achaia are from Delphi (HD022784 and HD021558); both are in honor of Romans.

42 HD056333 and HD056334, respectively. Although the former, a statue base, was inscribed during Hadrian's archonship in Athens, it would surely have lost much of its complimentary function if he had also been responsible for composing it. It was found in excavations in the Theater of Dionysus in 1862. The second inscription was found on the Acropolis in secondary use as a doorpost. See discussion of both in Miller 1992, 9-15.

43 See the text of HD056333 (to Hadrian). The Latin text gives Hadrian's imperial nomenclature. The Greek reads, "The council of the Areopagus and that of the 600 and the people of Athens [honor] their archon Hadrian."

44 Listed together, these three institutions designate the government of Athens in the Roman period. Geagan 1967 discusses their identity and function under Roman rule.

45 Current and future Roman administrators would have been one target audience; it had also long been common practice for young Romans from aristocratic families to pursue their education at Athens.

46 The Panhellenion was founded by the emperor Hadrian in 131/2 C.E. It was an organization which served to unify eastern cities with claims to Greek descent by emphasizing their shared Greek cultural heritage as well as their loyalty to Rome. See Spawforth and Walker 1985, Romeo 2002.

47 HD002922 (Dion in Macedonia), HD002925 (Pisidian Antioch), HD002928 (Philippi), and HD063734 (Troad).

48 HD008479 and HD055863. The Greek portion of HD008479 is an epitaph for a 10 year old girl which was added later beneath the first (Rizakis 1998, 184-5); the Greek of HD055863 is an older inscription which was reused as the tombstone of a Roman veteran (Rizakis 1998, 201-2). The Latin and Greek of the latter are carved on different sides.

49 Rizakis 1998, 49-52.

50 Note that the lack of bilingual inscriptions in the epigraphy reflects the epigraphical practice and not the speaking practice of the population. It is not direct proof of which language was more commonly spoken in Patras. Greek was certainly still in epigraphic use as well in the early and late Roman period (though more commonly in the second century CE and later). Rizakis (1998) catalogs over 100 Greek inscriptions from the city.

51 The two best preserved examples consist of a long text in Greek (HD022605) or Latin (HD056289) with a simple and formulaic tag tacked onto the end in the other language. Two others (HD043288 and HD060624) appear to be more balanced between Latin and Greek; the rest are too fragmentary to judge.

52 Typical examples are HD025936 (honoring a proconsul) and HD026563 (honoring an imperial procurator).

53 E.g. Figure 6 (HD026566), which honors Titus Manlius Iuvencus, son of Titus, of the tribe Collina. The text informs us he was an aedile, praefect *iure dicundo*, duovir, pontifex, and agonothete of the Isthmian and Caesarean games.

54 For the shift from Latin to Greek for official business, see Kent 1966, 18-19.

55 At least 30 of the 133 categorized inscriptions contain this formula.

56 HD012660 (Narbonensis), HD019448 (Africa, Crete, and Cyrene), HD019454 (Moesia and Brittania), HD056334 (Cyprus).

57 I.e., not statue bases, altars, grave monuments, or other free-standing objects.

58 For the basic publications of the architecture, see the various volumes of the Corinth series published by the American School of Classical Studies at Athens.

59 Division into fields along a measured grid plan by Roman surveyors. See Romano 2003 for centuriation at Corinth.

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Appendix: Tables 1 and 2

Form	**Number**	**Percentage of inscriptions with known forms**	**Number of cities where form is found**	**Percentage of cities where form is found**
Tabula (slab)	376	43%	22	51%
Architectural member	115	13%	11	26%
Block	106	12%	6	14%
Base	86	10%	12	28%
Stele (free-standing slab)	80	9%	17	40%
Statue base	37	4%	9	21%
Instrumentum domesticum (household equipment)	28	4%	13	30%
Tile	17	2%	4	9%
Milestone	12	1%	7	16%
Cliff	7	<1%	3	7%
Altar	6	<1%	4	9%
Grave monument	3	<1%	2	5%
Honorific/votive column	3	<1%	1	2%
Sarcophagus	2	<1%	2	5%
Cippus (small, low pillar)	1	<1%	1	2%
Paving stone	1	<1%	1	2%
Tessera (part of mosaic)	1	<1%	1	2%
Total	881	100%		

Table 1: Forms of the objects on which inscriptions are found. See http://edh-www.adw.uni-heidelberg.de/hilfe/liste/inschrifttraeger for classification criteria and illustrations. Only 43 out of 58 cities have inscriptions with known forms.

Type	Number
Building/dedicatory	68
Epitaph	239
Honorific	181
Imperial honorific*	62
Identification	8
List	6
Milestone	14
Owner/artist**	32
Public legal	17
Votive	83
Other***	3
Total	713

Table 2: Types of inscriptions by content. See http://edh-www.adw.uni-heidelberg.de/hilfe/liste/inschriftgattung for classification criteria.

* "Imperial honorific" refers to inscriptions which have the name of a Roman emperor in a case other than the genitive. These are identified inconsistently in the EDH as either "votive" or "honorific."
** The category of owner/artists inscriptions included stamped amphora handles only at Athens. Since stamped amphoras are not recorded elsewhere in the data, I have removed the nine examples from Athens from all statistics on categorized inscriptions.
*** Three types of inscriptions have only one example each from Achaia. These are an elogium (Athens), an acclamation (Corcyra), and a defixio (Rheneia).

Through the Picture Plane: Movement and Transformation in the Garden Room at the Villa *ad Gallinas* at Prima Porta

Kaja J. Tally-Schumacher & Nils Paul Niemeier

The recent villa and garden excavations of the Villa ad Gallinas at Prima Porta have inspired a new discourse regarding the villa, its gardens, and decoration.[1] Building on earlier discussions regarding transformative themes in the wall paintings and scientific identifications of the painted plants in the villa's famous Garden Room, we suggest that the garden may be read as a populated space of figures and not merely as a garden composed of plants. Utilizing green-screen technology with staged interactions in front of and with the painting, we identify viewers as critical components of the wall paintings' composition. Our green-screen recreation of the underground paintings points to an intentional choreography between the painting and viewer. The paintings of the Garden Room are formulated to accommodate observation by reclining diners while simultaneously eliciting garden-like strolling along the room's walls, as if the room were a real garden, blurring the distinction between the simulated and the real.

Figure 1: Print of the north wall from the Prima Porta garden room by Sikkard, published in Antike Denkmäler (1891) shortly after the discovery of the painting.

Introduction

Located just 15 kilometers north of Rome, the Villa *ad Gallinas* at Prima Porta has been long-renowned for two objects discovered during the 1863-1864 excavation season: the Polykleitan-esque statue of Augustus and the panoramic garden painting from a subterranean room located in the south-west of the villa complex.[2] The garden painting exemplifies the radical shift in the Roman painting styles of the 30s-20s BCE towards a more naturalistic style wherein the picture plane becomes permeable and the painted space is more directly connected to the real space of the viewer.[3] More recently, the discovery of gardens within the walls of the villa in the 1980s has prompted a renewed interest in the paintings and villa more broadly.[4] While the bibliography on the painting is rich, scholars have not placed viewers into the Garden Room and into dialogue with the images therein. Using green-screen technology, the authors and Cornell-affiliated colleagues recreated the Prima Porta garden painting and, following recent publications on Roman walking and garden interactions, used actors to engage the painted garden.[5] While many scholars have noted the illusionistic quality of the garden painting, our green-screen reconstruction and repopulation of the room with ancient viewers take the illusionistic argument to the next stage as the painting is not merely an object to be consumed visually: the viewers are an integral part of the composition.[6] Additionally, the painting choreographs two types of viewing. First, the perspective is manipulated in a way so as to best accommodate seated or reclining viewing, such as in Roman dining. Second, while the room is underground and inside, the painting imitates and elicits movements and interactions of strollers in real ancient gardens. Therefore, we suggest that viewing the Garden Room as a space populated by viewers allows for a greater interpretation of the painted garden as a transformed and transformative space.

The Garden Room

The subterranean Garden Room at the Villa *ad Gallinas* features four walls, measuring 11.70

x 5.90 x 2.88 m in total, which are covered by a continuous painting of an ancient Roman garden. A close examination of the corners illustrates the paintings' uninterrupted nature as plants from one wall continue past the corner onto the following wall. Starting from the bottom of the wall and moving upwards, the painting features a black band (possibly representing a walk or a pool) encircling the room. Above and beyond the black band are two fences: first a wicker fence separating the walk or pool from a green walkway, followed by a marble fence separating the green walkway from a dense garden deeper in the composition (Fig. 1). While the black band runs continuously across the four walls (with the exception of the break for the doorway into the room), the wicker fence features three open gates (one each on the short walls, and one on the long wall opposite the door into the room) inviting the viewer onto a green walkway that runs the full perimeter of the room. The far side of the green walkway is framed by a row of alternating small plantings (irises, ferns, and staked ivy with violets) directly in front of a white marble fence. The marble fence features convex niches (one each on the short sides and two each on the long walls) that each contain a tree (an oak and a pine on the short walls, respectively, and four fir trees on the long walls). The garden behind the marble fence is densely planted, and trees peeking out above the vegetation in the background suggest the garden occupies a deep space. The garden scene is topped by an expanse of blue sky that is punctuated by flying birds. Birds also perch in the trees of the garden, on the fence, and in the garden walkway. The very top of the composition features a narrow band that is identified as either the rocky edge of a grotto or as the thatching of a trellis.[7] The treatment of the plants and birds combines botanical and ornithological knowledge with artistic elaborations, allowing scholars to definitively identify all of the featured species in the garden scene. Even more importantly, the seasons are conflated in the image as plants of different seasons are forced to bloom and produce fruit together. Traditionally, the room is thought to have been used as a cool *triclinium* (dining room) during hot Italian summers.[8]

Previous Scholarship on the Garden Room

As the discussion of the paintings from their discovery to the most recent publications illustrates, the iconography of this garden is intentionally multivalent. While scholars have identified many possible interpretations, ranging from political, religious, and funerary associations to those of *ars topiaria* (the art of garden design), there is still more that can be gained from returning to this canonical work.[9] Möller's initial interpretation focuses on identifying the plant species present in the garden.[10] Rizzo, working in the 1920s, reads the paintings as a compendium of garden painting and of *ars topiaria*.[11] Grimal follows much of Rizzo's approach, paying particular attention to the naturalistic representation and the innovations of Studius, to whom he attributes the painting.[12] Gabriel's seminal 1955 publication on the paintings identifies and describes the plants and birds and their divine associations. Equally important, Gabriel identifies the number of craftsmen who worked on the paintings and their specialties.[13] Penso, like Gabriel and Möller, also identifies the plants within the painting, but his list of identifications is by far the least encompassing.[14] Bandinelli's discussion focuses on the chronological dating of the painting to the Augustan period, not on symbolic or design questions.[15] Settis is one of the first to begin approaching symbolic interpretations of the paintings, suggesting that the garden is connected to an interchange between art and nature and is also connected to funerary visual language.[16]

Current Scholarship

In part, the recent scholarly attention given to the garden painting is no doubt connected to Gaetano Messineo's excavations at the site from 1982-1992, which uncovered the villa's residential area, and Klynne and Liljenstolpe's 1996-1999 excavations of the villa's gardens.[17] These excavations have thus allowed scholars to begin placing the paintings into dialogue with the surrounding villa. Kellum suggests that the paintings and the statue of Augustus found at the villa are expressions of the Augustan

miraculum (miracle) and a new dispensation of peace under his reign.[18] Sanzi Di Mino suggests that the garden painting is the oldest surviving example of a genre type that remained popular throughout the Roman Empire, and places it into dialogue with scenes of painted architecture.[19] Andreae connects the imagery of the painting to the panels from the Ara Pacis, interpreting the space as an Edenic garden.[20] Förtsch is one of the strongest proponents of identifying an underlying ideological structure within the painting based on both the symbolic associations of the plants depicted and the paintings' relationship to the Ara Pacis monument, wherein both structures express the fertility of the Augustan golden age.[21] Reeder's approach has focused on connecting the Garden Room to the remaining parts of the villa, on bringing attention to often ignored elements, such as the stucco fragments from the ceiling, and on reading the painted panels alongside discussions of groves and grottos.[22] The most recent botanical reexamination of the painted flora, led by Caneva and Bohuny, attempts to rectify the contradictory botanical identifications made by past scholars by providing a new taxonomic interpretation of the paintings.[23] Based on this attempt of reclassifying the species displayed, Caneva and Bohuny encourage scholars to reinterpret the message of the paintings.[24] The recent excavations have also spurred new discussions on villa design where the orientation, location, and decoration of the Villa *ad Gallinas*' are treated as part of a larger design plan.[25]

Transformation: Mythological figures, plants, birds, and visitors in the Garden Room

While a number of scholars have pointed to the associations between the plants and particular deities, only Kellum brings our attention to the act of transformation, as many of the trees and birds are in fact transformed humans and nymphs in Greek and Roman myth (such as the nightingale, the larks, linnets, goldfinches, magpies, pine, myrtle, laurel, cypress, pomegranates, violets, and roses).[26] Furthermore, Kellum's list of transformed figures can be expanded to also include the poppy (previously Mekon, a youth, transformed by Demeter), the oak (Philemon, transformed by Zeus into an oak), and the acanthus (this may be an usual double play on the name, as Acanthus was turned into a bird by Apollo and Zeus).[27] To put this into better perspective, based on the most recent botanical analysis, nine of the 24 species depicted in the painting (38% percent) are transformed figures (Fig. 2).[28] The significance of these transformed plantings is further underscored by their placement and heightened readability in the composition.

But as Kellum's wording makes clear, her focus is on the act of transformation. She says that "the pine tree was *a transformation* of Attis, the youthful lover of the Phrygian goddess Cybele," and not that the pine *was Attis, transformed into* a pine tree (emphasis added).[29] Consequently, by focusing on the act or verb of transformation and its connection to Augustan visual language, we lose sight of the real, corporeal figures that populate the garden.

Like Kellum, Kuttner also alludes to a superficial correlation between plants and human figures in the Garden Room painting. Where Kellum identifies the mythological stories that pair with the painted plants, Kuttner suggests that the Garden Room painting shares visual qualities with contemporary monumental painted and relief narratives. Thus she suggests that the prominent pine and oak trees on the two short walls are set against a ground of less prominent plants much like the processional figures on the Ara Pacis relief, where pictorial depth establishes a hierarchy of importance (Fig. 3).[30] Although Kuttner identifies the visual similarity between the garden painting and developments in figural compositions, like Kellum, she views the depicted plants as mere plants without a transformed corporeal presence. We may, however, stretch Kuttner's and Kellum's observations even further. As Kuttner shows, the garden paintings visually parallel continuous figural narratives, a genre which collapses multiple episodes from a narrative into one image.[31] This is particularly

Species (Caneva ID)	Metamorphosis	Source
Acanthus, *Acanthus mollis*	Acantha	Ant. Lib., *Met.* 7
Chamomile, *Anthemis sp. (formerly Leucanthemum)*		
Strawberry tree, *Arbutus unedo*		
Boxwood, *Buxus sempervirens*		
Chrysanthemum, *Chrysanthemum corona*		
Orange, *Citrus sp.*		
Dogwood, *Cornus mas*		
Cypress, *Cupressus sempervirens*	Cyparissus	Ov., *Met.* 10.121ff.
Quince, *Cydonia oblongata (vulgaris)*		
Ivy, *Hedera helix*		
Iris, *Iris sp.*		
Laurel, *Laurus nobilis*	Daphne	Ov., *Met.* 1.490ff; Paus. 3.24.8.7; Hyg., *Fab.* 203.1
Myrtle, *Myrtus communis*	Myrrha	Ov., *Met.* 10.476ff; Hyg., *Fab.* 58.1
Oleander, *Nerium oleander*		
Opium poppy, *Papaver somniferum*	Mekon	Serv., *In Vergilii Bucolicon Librum* 2.47
Date palm, *Phoenix dactylifera*		
Fern, *Phyllitis scolopendrium (Asplenium)*		
Spruce, *Picea excelsa*		
Pine, *Pinus pinea*	Pitys	Nonnus, *Dion.* 16.363
	The Oitaiai*	Ant. Lib., *Met.* 32.5
Pomegranate, *Punica granatum*	Side	Apollod., *Bibl.* 1.25
Oak, *Quercus ilex*	Byblis	Ant. Lib., *Met.* 30.1-2; Ov., *Met.* 9.454ff; Hyg., *Fab.* 243.6
	Philemon	Ov., *Met.* 8.633ff
Oak, *Quercus robur*		
Rose, *Rosa gallica*	(As agent of transformation)	Apul. *Met.* 4.2.8
Viburnum, *Viburnum tinus*		
Periwinkle, *Vinca major (?)*		
Violet, *Viola sp.*		

Figure 2: Table identifying the plants in the painting, the metamorphosed figures, and the ancient sources for the myths (N. Niemeier).

Figure 3: Detail of the processional relief from the Ara Pacis Augustae, Rome. [Photography]. Encyclopædia Britannica ImageQuest. Retrieved 28 Feb 2016.

Figure 4: Before and after photos illustrating the use of a green screen in replicating the garden painting and staging interactions. Photos by N. Niemeier and K. Gleason; Garden Room background image from StudyBlue.

significant as scholars of Roman mythological painting have shown that Roman viewers recreated full mythological narratives from abbreviated painted representations.[32] Thus we might imagine a Roman viewer experiencing the Garden Room cinematically. Upon first entering the room, the viewer is faced with multiple mythological narratives at their conclusion, but upon closer inspection, the viewer unlocks and reads the implied narratives as they identify each individual plant. The painting is thus transformed from a stationary image into a film-like experience where the viewer is inundated with scene after scene of transformations as nymphs and humans interact with deities and their subsequent transformations into plants and birds. Unlike figural representations of myths, where the ending is often not depicted, here in the painted garden there is no alternative ending that the imagination may create. In some ways, therefore, the Garden Room presents a more terrifying scene than its figural counterparts, as the end of the narrative is explicit: the end of corporeal life in exchange for eternal existence as a plant or bird.[33] Even if one were to follow the initial interpretations of the room as solely a representation of a *locus amoenus* (pleasing place) without deeper significance, the fact that its floral and faunal denizens are transformed cannot be denied.

A New Approach: The Populated Garden

The concept of a populated garden of transformed figures becomes more pronounced when real viewers and garden visitors are placed into the composition. To create the experience of the garden room without traveling to Italy, we created an artificial Garden Room at Cornell University using green-screen technology. We then performed recreations of movement in front of this screen to simulate different interactions with the space. These include individuals strolling alone while viewing and interacting with the garden painting, men and women walking together, and interactions between people of different social status encountering each other while viewing the painting. As Roman gardens were located at the intersection of social interactions, they are places where the landed gentry of the senatorial and equestrian classes mingled with villa-owning, wealthy freedmen, elite courtesans, non-normative figures like *cinaedi* (a complex, derogatory term referring to effeminate or homosexual men or dancers), foreigners, and visiting intellectuals, among other guests of the garden.[34] After filming, the green-screen was digitally removed using Adobe Premiere Elements, and one of the panels of the garden room was inserted in its place and set to scale (Fig. 4).[35] Working with strolling individuals and a stationary camera produced better results given Premiere Elements' limitations in creating a background that moves with the stroller in the foreground (the effect, otherwise, is one of the stroller walking on a treadmill in front of a stationary image). This forced us to emulate the experience of the static viewer watching the strollers. By using the camera and green-screen, it is now possible to have some idea of how Roman visitors might have interacted with each other either in a real garden setting (interacting with physical plants) or in the Garden Room. Furthermore, situations were reconstructed in which the strollers moved in front of a static viewer (e.g., a person reclining on a couch) in order to recreate the ways in which people strolling in the garden or the garden room might appear to become part of the garden or painted space from the perspective of a seated or reclining viewer. These were done as still-shots, and the background of the garden room was inserted with Adobe Photoshop.

Timothy O'Sullivan's recent work on Roman walking and posture informed our recreations of Roman movement and bearing, and was further built on the 2013 work done by Gleason, Simelius, Tally-Schumacher, and Torrey de Frescheville regarding movement through Roman strolling gardens.[36] The costumes and postures of the reenactors are also based on ancient statuary and paintings as relevant to the different gendered and socioeconomic identities of the potential stroller/viewers.

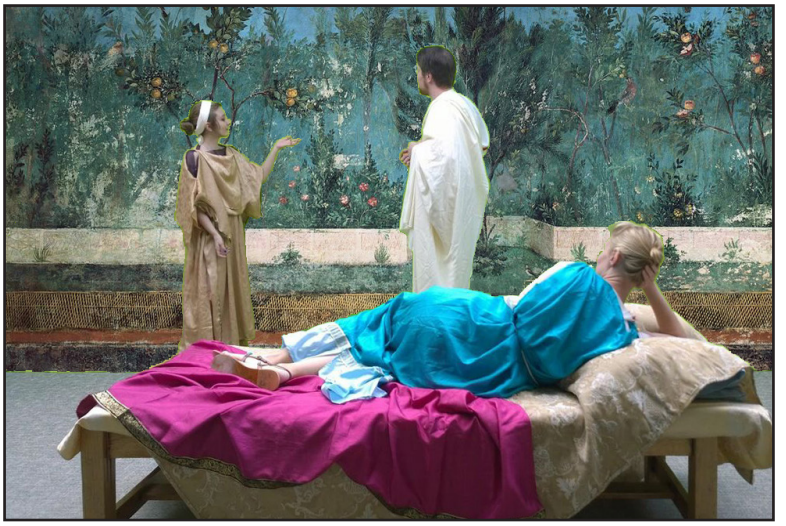

Figure 5: Illustrating the illusionistic quality of placing real viewers against the painting, viewers attempt to pick painted fruit. Photo by N. Niemeier and K. Gleason; Garden Room background image from StudyBlue.

Placing costumed, Romanized strollers in front of the painting has made a number of observations clear, particularly when we consider the possible types of viewers (i.e. active strollers versus reclining diners). Simply put, the presence of human figures set against the painting populates and completes the image, and transforms the two-dimensional painting into a three-dimensional space. There is an explicit pleasure and desire in attempting to pluck the ripe fruit off the trees or to bend and smell the aroma of a particular blossom (Fig. 5). Although Caneva argues that the painting is a purely symbolic construction and thus does not reflect actual Roman gardens, recent archaeological excavations at the Villa Arianna at Stabia in the Bay of Naples suggest that the design and plantings of the painted garden do in fact recall real garden spaces.[37] Our plan of the painted garden bears remarkable similarities to the densely planted beds in the Peristyle Garden at the Villa Arianna, with walkways separated from planting beds by fences, and plantings arranged in a manner similar to those depicted in the painting—smaller plants are placed in the foreground, with larger shrubs and trees placed further away from potential viewers in the house. This suggests that the parallels in design between painted and real gardens are not superficial and that consequently the garden painting is not purely or merely an artistic construction (Fig. 6).[38]

Observations

In this study, when the camera takes the view of a reclining diner (set roughly at the height of a reclining figure's eye-level), a number of observations about the construction of the garden can be made. First, the composition and perspective of the painting are manipulated in such a way as to accommodate the view of a reclining diner in a way that a real garden could not. This is exemplified by the different perspectival treatment of the bottom and top halves of the painting. The bottom half of the painting, particularly the area between the marble balustrade and the black band at the very bottom of the painting, are tilted up towards the viewer.[39] While such a drastic slanting of the ground departs from a more naturalistic perspective, it does have an important function. Without such an intense tilt, the wicker fence

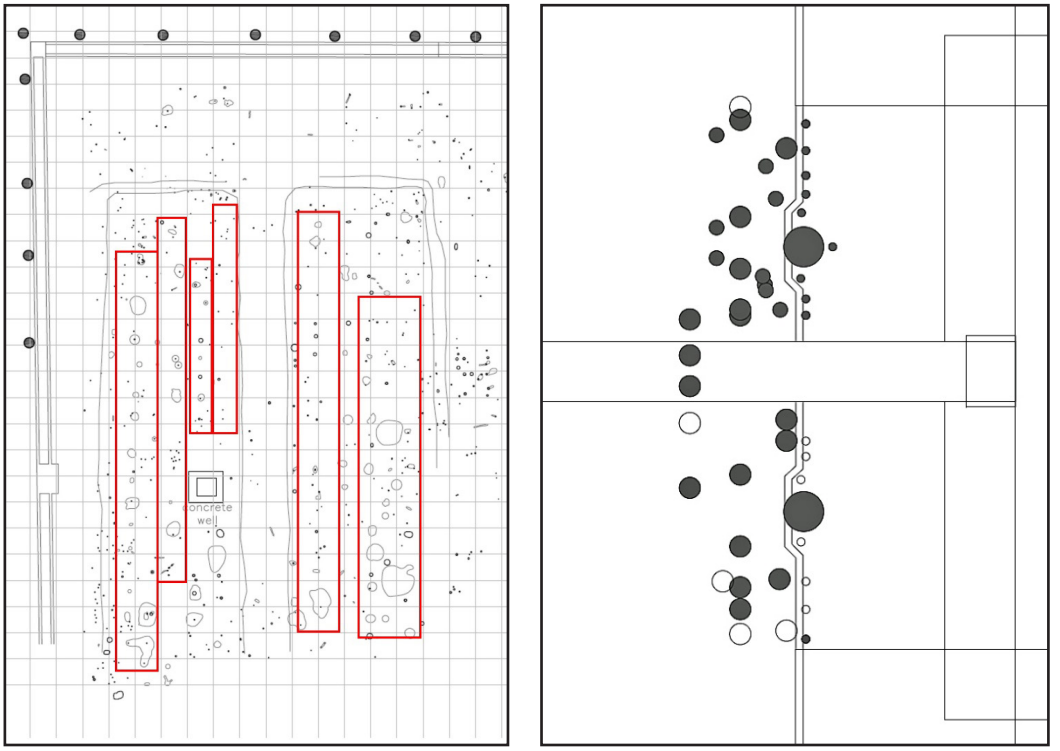

Figure 6: Plan of the plantings in Planting Bed 1 and 2 from the Peristyle Garden at the Villa Arianna in Stabia with rectangular areas highlighting parallel, straight rows of plantings (left) and our plan of the painted plantings on the east wall of the Prima Porta Garden Painting (right). (K. Gleason, T. Howe, M. Palmer, M. Powell, N. Niemeier).

would overlap the more distant marble fence, thereby blocking the seated view of the green walkway, the irises, ferns, ivy, and violets, and the black path or pool.

This does not mean that the painting prioritizes a seated position of viewing; in fact the painting is constructed in such a manner as to accommodate a second, different elevation of gaze, that of strolling viewers. The videos of strolling viewers in front of the paintings illustrate the connection between the viewer's height and the location of many of the fruits. Even taking into account that our reconstructed figures are taller than their real ancient counterparts may have been, there is a clear intentionality on the part of the artist in placing the majority of the fruit at the elevation of a stroller's view around the entire room.

The heavy depiction of pruning marks on the painted fruit trees suggests that the painting reflects a real garden aesthetic where plants were forced to bloom and fruit at a stroller's height. Furthermore, while the bottom half of the painting tilts the ground up, a close analysis of the plants behind the marble fence and their trunks displays a change in perspective where the ground recedes into the background without a drastic tilt. This creates a more naturalistic space that is equally accessible to strolling and seated viewers.

If the paintings elicit and choreograph strolling and seated viewing, they also "plant" the picture plane away so that viewers become critical components of the composition. The picture plane is permeable in part by the encompassing nature of the paintings—one

can almost imagine backing into the picture plane as easily as walking into it. While a number of scholars have dismissed the underground room as simply a *locus amoenus*, a pleasant, cool, summer retreat, the underground location of the room actually serves to further transform the painting into a reality.[40] The cool, damp air of the subterranean space, augmented by the climate of the real gardens above the room, recreates an idealized microclimate of a lush, liberally-watered, shady garden so that the viewer *feels* as if he or she is in the garden itself. The free- and single-caged birds play an equally important role in further deconstructing the picture plane. The barrel-vaulted ceiling of this room, paired with the relatively sparse furnishings of Roman villas, creates an ideal space for the reverberation of sounds.[41] Here, the echoes of a real caged bird, or the sounds of real birds in the aboveground gardens filtering in through the vault's windows, give voice to their painted companions. The effects of sounds interacting with the painted surface further collapse space by uniting the painted garden with the real gardens above ground. Additionally, the panoramic composition of the Garden Room literally surrounds and transports the viewer into a real garden populated by victims of transformation—might it be intimated that the viewer, too, may eventually succumb to such a fate? Might one lose one's own identity and become part of the painted scene? Perhaps a prolonged visit to the room is dangerous–a deity may appear at any moment to transform the viewer and, in so doing, completely blur the divide between the viewer-soon-to-be-plant and the plants of the painting.

Furthermore, the chthonic location of the room and the ascending departure via stairs is ripe with liminal and transformative associations. Deities who return from the underworld such as Dionysus and Heracles come to mind, as well as animals, such as serpents, which live above and below the ground, and transform through the shedding of their skin. The Augustan connection to serpents is particularly appealing, as Apollo in the guise of a serpent is said to have sired Augustus, and small serpents are even found on the vegetal panels of the Ara Pacis, giving credence to their significance in Augustan visual and cultural language.[42] While serpents are not explicitly painted in the Garden Room, six of the plants clearly depicted in the painting were known in antiquity to be effective against snakebites and one was used as a snake repellent, as if snakes and snake bites were a real danger in the painting.[43] Moreover, the rising popularity of animal fables during the Augustan period suggests that "minor" animal or bird associations in artworks should not be ignored.[44] Although the viewers safely skirt transformation into plants or birds, they cannot in fact escape a different type of transformation. They depart the subterranean structure, slithering up the stairs and across the threshold between the underground and the surface world like an Augustan snake emerging from his den.

Conclusions

The use of a green-screen to reconstruct movement along the paintings of the Garden Room and viewership of the space demonstrates the intentional manipulation of perspective and composition to specifically accommodate two means of viewing: via reclining and via strolling. The upward tilt of the foreground maximizes the view for the seated viewer, indicative of Roman dining, while the location of the painted fruit at standing eye level points to a choreographed experience which imitates actions performed in real gardens: the painting elicits garden strolling inside and underground. By manipulating different variables in reenactments of activity in the Garden Room (strolling versus reclining, multiple people versus a single person, etc.), the multivalent readings of the room become further apparent. The green-screen fosters direct contact with images and spaces in ways in which PowerPoint presentations, book illustrations, and plans cannot compete. This sort of simulated interaction is especially important for spaces that are difficult to access or are deteriorating, but where better preserved documentation exists.

By expanding on previous scholarship on the presence of transformative themes and the connection to contemporary figural, continuous narrative painting, we identify the figural quality

of the garden plants. The Garden Room is not simply connected to the Augustan political transformation as Kellum suggests. The painted garden is populated by, or rather, planted, with metamorphosed figures. As the picture plane is blurred, there is an explicit suggestion that the viewer may become the next victim-turned-planting or may leave the plane of the real and enter that of the picture.

The reintegration of the room and painting with real viewers illustrates the participatory nature of this space and the sophisticated deconstruction of the picture plane. The garden choreographs one's movement through two prioritized modes of viewing, as well as by the interplay between real doorways and painted wicker gates set beyond the picture plane. One might imagine a stroller walking along the black band towards the wicker gate, side stepping through the picture plane and continuing down the green walkway. The relationship between the Prima Porta garden painting and the albeit later garden beds found at the Villa Arianna suggests that the painted garden elicits movement in the viewer that directly parallels experiences had in real spaces, thereby further blurring the separation between the real garden and the painted garden. With the echo of the birds and the aromas of the flowers from the aboveground gardens and the cool, moist, and shady sensation of the air, the movement of the viewer might not appear to be part of a fantastical or mythological world—the painted garden *is* a real garden. There is no picture plane.

Endnotes:

1 The authors gratefully acknowledge the assistance of Dr. Kathryn L. Gleason, Jessica Pfundstein, and Mujahid Powell for their collaboration on and contribution to the reenactment of ancient interactions with the Garden Room paintings, as well as their feedback on this project. We also thank Dr. Thomas Howe and Michele Palmer for their assistance at the Villa Arianna, as without their aid the project would not have been possible to complete.
2 Calci and Messineo 1984, 8.
3 Kuttner 2012, 23-4.
4 Liljenstolpe and Klynne 1998, 127-48.
5 The green-screen reconstruction came out of a Cornell University seminar, The Parks and Imperial Fora of Ancient Rome, held in the Spring of 2015 by Dr. Kathryn L. Gleason. The reconstruction is based on the collaborative work of Dr. Gleason, Kaja J. Tally-Schumacher, Nils P. Niemeier, Jessica Pfundstein, and Mujahid Powell. O'Sullivan 2011; Howe et al. 2016.
6 Kuttner 2012, 23-25.
7 Reeder 2001, 35.
8 Reeder 2001, 49.
9 Kellum 1994a, 224.
10 Möller 1890, 78-80.
11 Rizzo, 1929.
12 Grimal 1943, 320-30.
13 Gabriel 1955.
14 Penso, 1986.
15 Bendinelli, 1988.
16 Settis 1988, 3-39.
17 Klynne 2002, 19-20.
18 Kellum 1994a, 223-24.
19 Sanzi Di Mino 1998, 209-13.
20 Andreae 1999, 31-39.
21 Förtsch 1989, 333-45.
22 Reeder 2001, 67-75.
23 Caneva and Bohuny (2003, 151) analysis illustrates a number of discrepancies between Möller's 1890 identifications, Gabriel's 1955 identifications, and Penso's 1986 identifications. The correct identification of the plants is essential before the paintings may be interpreted through iconographic, mythological, or other lenses.
24 Caneva and Bohuny 2003, 154.
25 Zarmakoupi 2008, 269.
26 Kellum 1994a, 221. On pine and Attis, Ov., *Met.* 10.103-105; on myrtle Paus., 6.24.7, on laurel Ov., *Met.* 1.548f, on cypress Ov., *Met.* 10.106f, on pomegranates Arn., *Adv. nat.* 5,5f, and Clem. Al., *Protr.* 2.19, cf. 2.22, on violets Arn., *Adv. nat.* 5,5f, and Julian, *Or.* 5.168 c, and on roses Paus. 6.24.7. For the birds: on nightingales Ov., *Met.* 6.668f, cf. Philomela, Verg., G. 4.511-515, on partridges Ov., *Met.* 8.237f, on larks, linnets, and goldfinches Ant. Lib. c. 7, on magpies Ov., *Met.* 5.29f.
27 Ant. Lib. *Met.* 7, Serv., *In Vergilii Bucolicon Librum* 2.47; Ov., *Met.* 8.621-696.
28 Caneva and Bohuny 2003, 151.

29 Kellum 1994a, 221. Italics by authors for emphasis, not original.
30 Kuttner 2012, 24, 28.
31 Leach 2012, 141-62.
32 Leach 2012, 143-44.
33 Newby 2012, 349-89, Bergmann 1999, 81-108.
34 Niemeier 2015, 24; Stackelberg 2009, 70.
35 Niemeier 2015, 59, note 192.
36 O'Sullivan 2011; Gleason et al. 2013.
37 Caneva 1999, 79, Gleason et al. 2008.
38 The Large Peristyle garden at the Villa Arianna is one of the first of its kind to be discovered. Unlike the small urban gardens of Pompeii studied by Jashemski, the Villa Arianna garden follows the same aesthetic principles as the Prima Porta Garden Room painting. Moreover, both spaces reflect elite villa design, unlike Pompeian urban private and public gardens.
39 Criminisi et al. 2004, 2.
40 Dawson (1957, 148), like other reviews of Gabriel's publication, are indicative of the opinion that the room and the garden paintings are merely a *locus amoenus*, and that deeper interpretations are not needed.
41 An examination of even elite Roman spaces illustrates a relative sparseness of furnishing by modern standards. Archaeological records and painted representations of elite domestic spaces lack large tapestries or canvases which greatly affect room acoustics. *Triclinia* tend to also lack tall shelving, such as those used for scrolls, which would have been held in a function-specific room, such as library, thereby again showing a predilection for bare, painted walls which elicit echoes.
42 Suet. *Aug.* 94.4; Kellum 1994b, 34-35. The Ara Pacis vegetal panels are littered with tiny hidden creatures, not just snakes, but frogs, scorpions, grasshoppers, lizards, snails, sparrows, and a butterfly as well. Many of these creatures are associated with Apollo, and have liminal/transformative associations.
43 Plin. *HN*: 1.21, 1.39, 13.9, 2.60, 13.103, 13.112–113, 13.118, 15.30, 15.39, 15.118–126, 16.79, 16.107, 17.62, 17.67, 17.95, 21.27, 21.40–41, 21.64, 21.68, 21.130, 21.172, 22.53, 23.105, 23.107, 23.114, 23.159, 24.90, 24.141.
44 Phaedrus, I. *Pro*l. 1, 1.2; Suet., *Aug.*, 74, 78; Quint., *Inst.*, 5.11.19-20; Demandt 1991, 397-418.

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Insights Into the Function of Ireland's Souterrains

Heather Menz

Despite frequent discovery, very little has been gained as to the purpose and intention of souterrains in Ireland during the Early Medieval period, from 400 - 1169 C.E.. Little beyond description and planning of most of these man-made caves has been completed due to a simple lack of research focused on these sites alone. By performing a regional study of the souterrains found in County Cork, Ireland and a small sample selected for field investigation in Northern Ireland, this study has been able to ascertain potential insights into the nature of these structures. The focus of this study is on those souterrains that are located away from any known occupation enclosure of the period. The idea behind the study was that the evidence of settlement, or the lack of it, at souterrain sites could aid interpretations of the sites' purposes. Further, soil phosphate testing is being used as selected sites in Northern Ireland to determine if human occupation was present at the unassociated sites, or if these sites were traveled to from other permanent locations. Current results indicate that some of these souterrains were the location of summer transhumance, or locations of summer cattle grazing sites, and were designed to protect the women and children who cared for the cattle in the uplands. If souterrains were indeed designed for defensive purposes, the current image of conflict for the period could be drastically changed.

Introduction

It is the intent here to discuss the archaeological use of theories of landscape and conflict and as they apply to the study of Irish souterrains, built and used during the Early Medieval period. It will also touch on the purpose and intention of the construction of these souterrains. Through a regional study of those found in County Cork and a small sample selected for study in Northern Ireland, this study, so far, has been able to gain certain insights into the nature of these structures.

Souterrains are completely subterranean man-made structure thought currently to be used as places of storage and refuge, consisting of combinations of passages and chambers, some of which include additional features such as cupboards, escape passages, air-vents, drains, trapdoors, elevated trapdoors and jambstones. Some also contained defensive features. They could be entered through simple ramps, steps, hatches, shafts, pit-drops, or a combination of the above.[1] The passages could be easy to navigate or have constrictions in height and breadth making traversing inside difficult (Fig. 1). The inner dimensions of those souterrains used in this study were on average measured between two and three feet in height along the passages and around five feet high at the center of the chambers. It is important to point out that some passages measure as small as 20 inches square (Fig. 2). In comparison, the average height of men during this period was approximately 167.1 cm or five feet six inches and women averaged at 154.8 cm or approximately five feet tall according to a mortuary study conducted in County Donegal.[2]

Through associated finds and historical documents, the most recent researchers have placed souterrains in existence from c. 500- c. 1200 C.E..[3] Clinton suggests souterrains were thriving between c. 750 - c. 1250 C.E. There are some that may have appeared before this time and a few that remained in use afterwards. Souterrains were tunneled into rock and boulder clay or were built from drystone within a prepared trench.[4] Some were thought to have been natural rock caves or clefts that were expanded to suit specific needs and others may have been made from wood. A very small number of timber-built souterrains have been found.[5]

Figure 1: Passage and Chamber of souterrain, located within Dromena Cashel (stone walled enclosure) in County Down, Ireland. This souterrain was built with a pit-drop entrance. Photo by H. Menz.

It is the general consensus that souterrains were built as places of storage which were occasionally used as a place of refuge. They are an architectural features that became more popular during a time when feelings of fear and conflict were rising. Through locational analysis, or the plotting/mapping of known sites and studying their location relation to their general environment and other sites, and looking at their inner design, we can provide some insights into their nature beyond the general statements made in previous works. Beyond simple excavation and description, not much attention has been paid to these features in the landscape. Some were located within known settlements/farmsteads, while others have no known enclosures or settlements associated with them at present. It is the intent to further investigate the nature of these unassociated souterrains and determine if people were in fact living at these sites, a detail

Figure 2: The creepway (approx. 0.5m square) and chamber (1m by 2m) of one of three souterrains located at the Ballywee settlement, County Antrim, Ireland. Photo by H. Menz.

that has only been assumed up to this point. The choice of settlement patterns, household organization and the adoption of technological innovation are only a few of the everyday tasks which are embedded with important cultural choices.[6] The decisions made by the Early Medieval peoples in Ireland on where to place their farmsteads were influenced and guided by their cultural background and relationship with their local environment. Bender has written that "landscape is the spatial manifestation of the relations between humans and their environment."[7] People change their work spaces, living spaces, homes and environments according to how they effect their senses, value and use and therefore they are constantly changing as people engage with them and re-work them to their needs. Cultural identities are created and disputed partly through the engaging with their environment.[8] As humans interact with their cognized environments, or the environment that is that peoples cultural understanding of nature as opposed to literal or operational environment, contradictions inevitably arise and these contradictions are the material of change. Changes come to fruition with the resolution of conflicts between and among human groups, as well as between humans and the physical environment.[9] These changes can be seen in Medieval Ireland in architectural features, changes in the written language, and farming techniques.

Early Christian or Early Medieval Ireland encompasses the period between c. 400 C.E. and c. 1169 C.E.. The evidence available for this period comes from both archaeology and several written documents. A good share of the information provided in the historical documents has been at least partly supported by archaeological data. Information provided by annalists and palynological data indicate a climate that made the growing of cereals difficult.[10] There are several recorded instances in which nearly all the crops were lost, bread was not available and nearly all the cattle of Ireland were lost.[11] While previously these instances of economic shortages would have been interpreted as the cause of conflict, aggressiveness and war-like values, according to Ember and Ember[12] it is rather the recurring threat of unexpected disasters like these in this climate that was the cause of conflict. This pattern is most apparent, according to their study, in societies with less complex political structure.

More recent research has centered on the topic of the extent of the social hierarchy. Archaeologically, there is little to differentiate one site from another. Looking at the usual indicators of social stratification: burial practices, settlements patterns, and zooarchaeological assemblages, has revealed little.[13] Soderberg believes that the archaeological evidence only shows that the clientage of Early Medieval Ireland, or relationship between lord and vassal initiated by the lien of cattle, fostered a higher degree of social stratification, but the cooperative features of the institution prevent too much distinction. The rather symbiotic relationship between lord and vassal of giving and taking shows very little differentiation in material culture between sites.

At this point in time, Ireland was dominated by a pastoralist economy and was transitioning

from local kin-based social politics to regional dynastic lordships. Another study includes paleoenvironmental data, documentary evidence, and settlement patterns to show a possible socio economic shift during this early period.[14] Settlement patterns seem to shift towards more arable land coinciding with the height of souterrain use. Pollen data suggests that cultivation of cereals increased during the sixth through eighth centuries and again during the ninth century.[15] This coincides with the supposed rise in Irish overlords during at least the eighth and ninth centuries if not earlier.[16] The majority of the population comprised of mixed-farmers whom were dispersed over the landscape. Little buffer was allowed against agricultural deficits which led to hunger, increased morbidity, depressed fertility and plague. Much of the violence that occurred was scheduled and allowed in congruence with the agricultural calendar, the most violence occurring over the spring and summer when food stores were low and fields had yet to be harvested.[17] It was around this time, with the rise of overlords, that there is a possible change in conflict patterns occurring that the rise of souterrains could be indicative of. A predictor of violent behavior was a socialization for mistrust.[18] The enculturation of fear and mistrust of strangers, or others, resulted in a people much less likely to resolve conflict through negotiation as they see all culturally constructed 'others' as potential enemies. This idea of a 'socialization for mistrust' encourages us to look for other indicators of conflict in the archaeological record beyond the obvious walls, defenses, weapons, and skeletal remains and more towards physical evidence within the community.

The farmsteads of the between 400 and 750 C.E. before souterrains were at their height, were scattered across the landscape and consist mostly of enclosed, single family settlements (rath). This fragmentation of society into small nuclear dwellings, most of which were delineated by a circular earthen bank and ditch are a great example of an indicator of fear or mistrust.[19] The introduction and rise of the souterrain, some of these souterrains are located within one of these enclosed farmsteads, preliminary research suggests that up to 60% of souterrains are not associated with an enclosed settlement and are thought to be indicative of an open settlement.[20] Souterrains were clearly a defensive mechanism being completely subterranean and effectively invisible from the ground surface. Much like McCartney's study of fear in Iron Age France, this could represent a shift from small scale endemic warfare and mistrust of a fragmented society to a period of more complex, full scale warfare.[21]

A souterrain could protect important food stores and the families that built them in time of need. If souterrains were intended to protect against cultural outsiders, then the completely subterranean nature should be considered sufficient protection. However, access from within the souterrain itself was restricted by defensive mechanisms such as drop entrances, trap doors, jambstones, constricted passages (Fig. 2) and inner doors. This suggests that the builders of the souterrains were expecting them to be found, indicating a defense against members of their own culture familiar with the existence of these structures and who would be looking for them. The existence of machicolation (recessed alcove above passages where defenders could take an offensive stance such as dropping stones or other objects on attackers) like features in some support the refuge of people, in that someone would be waiting inside along the passage waiting to defend their people and belongings against intruders.

Present interpretations of the unassociated souterrains present in Ireland are previously unknown and unstudied open settlement types. Along these lines, they could indeed be simply be a single settlement type. Another interpretation could be that these souterrain sites are the colony sites of spreading and growing family groups. Farmers beginning their own farmstead, perhaps after earning their own cattle. Eventually these farmsteads could gain in economic status and are able to construct the earthen ramparts of an enclosed

farmstead for defensive/status/delineation purposes. It costs only two cows to build a souterrain according to the texts, but far more are required to build a rath.

Alternatively, the day-to-day activities of the people who built the souterrains may indicate a separate function or secondary option. These unassociated souterrains may be utilized at the summer transhumance or booley sites/villages in the uplands, often located a considerable distance from the more permanent dwellings.

The other issue at hand for this study is occupation. While it has been established that people were living at many of the raths located throughout the country, as single farmstead homes, were people actually living at the unassociated/unenclosed souterrain sites? If people were living at these sites, then the interpretation of a refuge for rapid and random raiding can be supported. If no one was actually living at these defensive sites, then the idea of the types of conflict put across by the texts of the periods may be misrepresenting the type of conflict that was occurring. In order to utilize these sites, if people were not living there, more advance notice of conflict would be required in order to travel to the souterrain. Alternatively, perhaps they were strictly to protect their goods and belongings at an off-site location.

For the purposes of this study two methods have already been utilized: Thiessen polygon landscape analysis and soil chemical phosphate analysis.

Thiessen polygons delineate areas of influence around a given set of points based on proximity. This means that the area delineated by the polygon is closer to that enclosed site point than any other site point, determined through simple Euclidean distance. This method was applied to those sites plotted in the regional analysis of County Cork I conducted in 2006.

Furthermore, a soil chemical analysis is currently being conducted on several sites located in the Counties Armagh and Tyrone in Northern Ireland. Soil phosphate levels are being measured as indicators of human occupation. Elevation of phosphate levels has been proven to be the most stable indicator of human occupation. Phosphorus (P) is omnipresent in animal bone, tissue and manure, and is usually found naturally in soils only in low parts per million, however, human activities strongly elevate P in the soil and it remains relatively immobile.[22] Archaeological features such as burials, refuse pits containing animal bones, hearths, cooking features, or middens contain highly elevated P levels.[23]

First, all information available on the souterrains in County Cork was collected. A chart of 165 souterrains was created organizing the information by location, number of chambers, materials of construction, number of nearby raths, nearby historical monuments, and water resources. Those souterrains of which the exact location was found were plotted. The distance was measured between each souterrain and Thiessen polygons were constructed (Figure 3). Each was then separated from the other at half the distance. All the raths within these zones around the souterrains were noted as part of the landscape and any emerging patterns were analyzed.

Locational Analysis

Unassociated souterrains tend to be surrounded by raths in a semi-circular manner. One possibility is that these sites were colony sites. Farmers began their own farmstead, perhaps after earning their own cattle. Eventually these farmsteads gain in economic status and are able to build the ramparts of a rath for defensive purposes. In these cases, the farmsteads spent two cows to build a souterrain but were unable to gain enough cattle to build a rath. The fields of a rath were thought to radiate away from the rath, therefore it would make sense for a souterrain to belong to a farmstead that has yet to become a rath. One problem with this theory is that not all unassociated souterrains are in the vicinity of other raths. Other examples show a cluster of souterrains both within raths and unassociated in a circular pattern, but as of

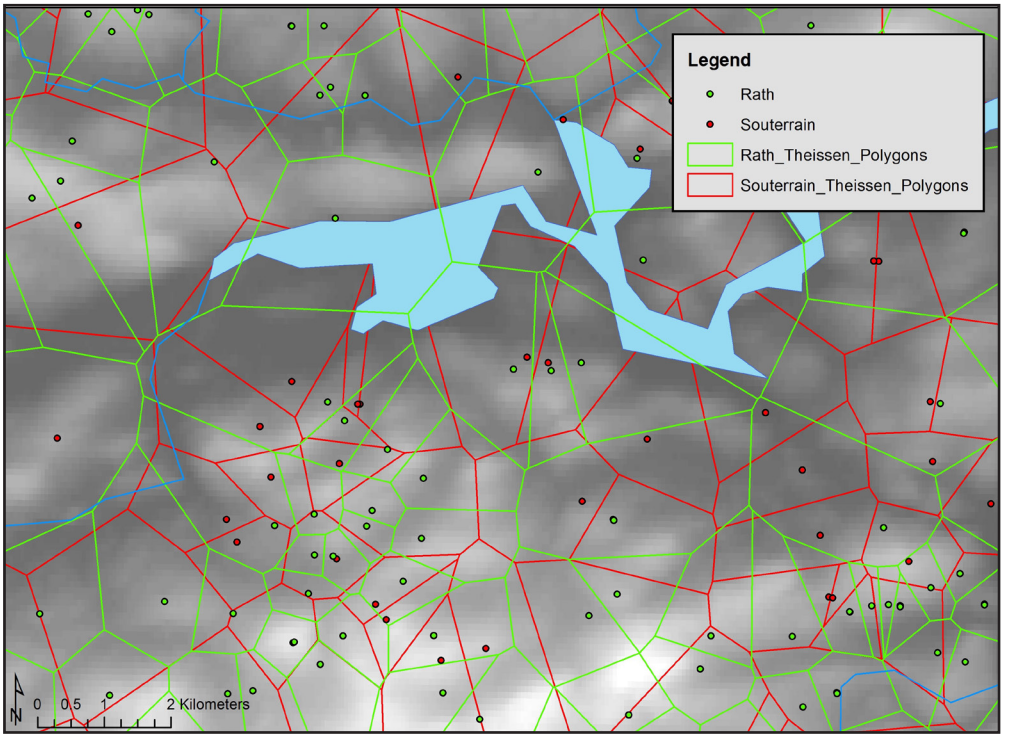

Figure 3: Thiessen Polygons of both souterrains and enclosed farmsteads (raths) in central County Cork Ireland.

the 1975 Ordnance Survey, there is no central rath. Some unassociated souterrains are located within two kilometers of another, while others are several kilometers apart. This supports the colony theory. The colonizers could move to the closest available land or decide to separate themselves from their origin even more. Without more fieldwork at these sites, it is very difficult to determine their origin. There is not enough conclusive evidence or consistency in these simple locational patterns to support this conclusively.

Alternative Explanations

Souterrains have been explained simply as a place of refuge for a farmstead, a cool storage place or a combination of the two. My extensive research has revealed other, more complex possibilities that have not been considered before. Extensive conflict is an obvious reason to place souterrains into a refuge category. The day-to-day activities of the people who built these structures have not been taken into consideration. I have considered the secondary and recurrent functions.

Another theory would be that some of these unassociated souterrains were those used during the summer months as part of a booley (transhumance) village. Booleying is the summer grazing of cattle on upland and mountain pastures, often at considerable distance from the permanent dwellings.[24] Here, usually, the young girls of a settlement would tend to the cattle and make butter and cheese, which would eventually be transported back to their home settlement as the stocks accumulated. If these pastures were actually located within a manageable distance of their home then the milk may be taken there for processing instead. They lived in huts or small houses that were left vacant the rest of the year. It was documented at one village

that the walls of these huts were built of mud and sod.[25] The people of Berehaven neighborhood, Co. Cork were once quoted: 'The mountains have good pasturage on them and they make huts and keep their cattle on the mountain in summer and live on new churn butter and milk.'[26] According to the Life of St. Senán, transhumance involved the travel of moveable supplies to make a house and primarily involved women and children.[27] A current project being undertaken in a deserted booley village on Achill Island, Ireland has been dated as having been in use from the 12th to the 19th centuries.[28] Souterrains were in use through 1200 C.E., which falls into this time period. While these dates do not cover the entire period of souterrain use, it can be said that booleying possibly occurred before the 12th century in some fashion.

Souterrains, being an underground structure, would be a cool, even-temperature storage space for dairy goods. The defensive features could be to protect the goods created there. They could also have served as a refuge for those using the booley village. Many accounts have said that it was the young girls who accompanied the cattle to the booley village probably without a substantial male presence, during the season favored for cattle raiding.[29] The farmers would want a way to protect the girls from raiders, who would primarily be after cattle but definitely would not be against collecting slaves or wives as well.

Souterrains are frequently located near the higher elevations. Many of those who have published on the subject noted that they were located on the southern slopes. The southern slopes would protect the settlement from the prominent winds and provide for drainage. The average size of two to four chambers in souterrains would account for several farmsteads utilizing the same souterrain in the booley village especially considering that the upland pastures were used by many local families. In addition, the souterrain being used by several raths would account for the necessary labor to build the souterrain. Those booley villages that were within short distance from their home settlements would have been satisfied by a souterrain with one chamber for they were only storing milk until it could be transported back home. Quite often, the souterrains that possess only one chamber are very close to a known rath, well within a day's travel. Those raths that contain souterrains may have had their booley villages close enough to allow for the regular transport of milk for storage there, with no necessity for girls to spend time isolated far from the settlement.

Geochemical Survey

The geochemical surveys have been completed at two of the six chosen sites in Northern Ireland at this time and a partial survey has been completed at a third. Samples were taken at ten meter intervals in the area directly associated with souterrain location and then every 25-50 meters in the surrounding area, covering at least 100 square meters. As most of these sites are located in land broken up into several fields used for pasturage, as much of the adjacent land was tested as feasible.

So far I have studied two unassociated souterrains and one associated with a rath. The souterrain associated with a rath presented phosphate hotspots, which after excavation proved to be associated with modern agricultural activity in the form of french drains.

The second site, the first of the unassociated souterrains, indicated the presence of human occupation through elevated phosphate right in the direct vicinity of the souterrain (Fig. 4). The excavation of a one-meter by three-meter trench revealed a possible house floor, though no datable material was recovered. The other difficulty presented at this site was also modern agricultural activity. The discovery of a house floor was not definitive as the compact, charcoal flecked surface indicative of house floors of this period and only presented itself in very small locations throughout the trench (Fig. 5). Much of the potential occupation layer had been disturbed the previous summer when the landowner plowed the field with a new twelve

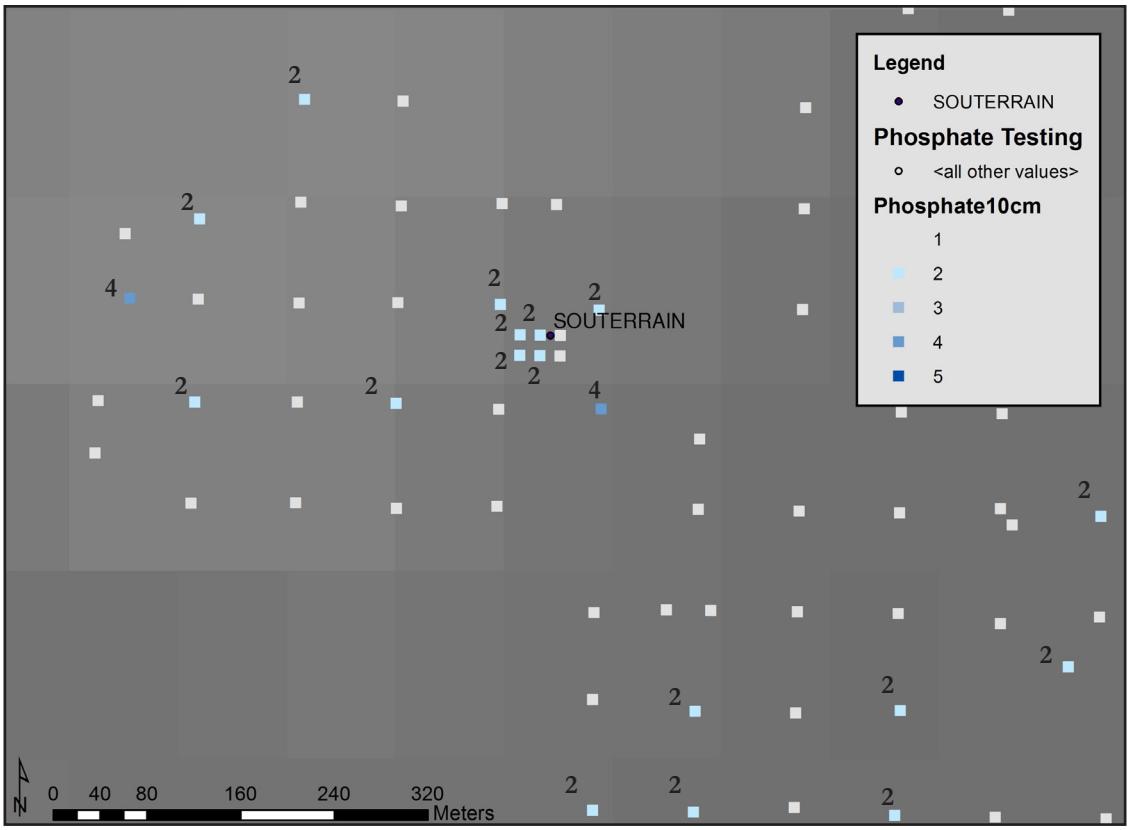

Figure 4: Phosphate results from a depth of 0 to 10cm below ground surface of fields surrounding unassociated souterrain, County Tyrone, Ireland.

inch plow, which replaced their much smaller four inch plow. Local archaeologists suggested studying a site in Northern Antrim where there would be less modern agricultural disturbances and this has been planned for the future.

At the third site, another unassociated souterrain, no excavation has occurred as no measurable increase in phosphate presented itself around the souterrain site. I was unable to conduct the chemical survey in one field adjacent to the site of the souterrain due to the planting of barley by a local farmer renting the land. There were no elevated phosphate levels found at the location of the souterrain.

The limited information provided by the phosphate testing thus far indicates that each unassociated site may have served a different purpose. Some may have been open settlement sites occupied by people in an adjacent house, while others remained alone with no associated occupation or very limited and short occupation phases that leave no chemical trace in the soil. It is my recommendation to further include geophysical testing in conjunction with the chemical analysis to reveal any other evidence of non-surface occupation that would not have been detected by the phosphate testing. It is possible that the diet and practices of the people living in Ireland during this period limit the function of phosphate testing as a prospection method.

Figure 5: Excavation trench at County Tyrone unassociated souterrain showing compact areas of possible house floor remains. Photo by H. Menz.

Conclusion

Architectural features indicate that the people of this time lived in small households, the majority of which are located within enclosed areas suggesting a considerable demarcation between family groups. This combined with the nature of souterrains and an ability to protect personal items indicates intra-group conflicts in fragmented society that may very well change before and after the arrival of the Anglo-Normans in 1169 C.E. but this is outside the scope of this article.

Much more excavation and research is needed to gain a better understanding of souterrains. It can be said that their physical features support the conclusion that they were intended as places for storage and temporary refuge. The locations of some suggest that their original purpose may have been as storage and refuge for booley villages, especially the unassociated sites, and eventually their usage was expanded to serve other purposes. Those located within raths would have served the same purpose as those that were in a booley village. It is impossible to determine whether the unassociated sites pre-date those within raths, or possibly what they held until further excavation and testing can be set in motion. Their features have potential to tell us much information on the medieval Irish: economy, social organization, political status, gender/childhood, and religion. Thus, they deserve more attention. While they initially demonstrate minor or secondary functions to other settlements, they may hold a more prominent key to several other aspects of life in Early Medieval Ireland.

Endnotes:

1 Clinton 2001, 95
2 McKenzie and Murphy 2011, 134
3 Clinton 2001, 95
4 Warner 1979; Clinton 2001
5 Clinton 2001, 10
6 Lightfoot et al 1998
7 Crumley and Marquardt 1990, 73
8 Bender 1993, 3
9 Crumley and Marquardt 1987
10 Kelly 1997, 2
11 Kelly 1997, 2
12 Ember and Ember 1992
13 Soderberg 1999
14 Kerr et al 2009
15 Kerr et al 2009
16 Ó Corráin 1972
17 Patterson 1994, 134-135
18 Ember and Ember 1992
19 McCartney 2006, 103
20 Buckley 1988-89, 64
21 McCartney 2006
22 Woods 1977
23 Holliday and Gartner 2007
24 Lucas 1989, 50
25 Lucas 1989, 61
26 Lucas 1989, 62
27 Patterson 1994, 78
28 http://www.gg.rhbc.ac.uk/qed27/link2htm accessed 2006
29 Patterson 1994, 91

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Minoan Peak Sanctuaries of East Crete: A Walking Perspective

Katerina Glaraki

*The aim of this paper is to rethink the Minoan peak sanctuaries of East Crete from a walking perspective. Walking will be used as a mean of understanding and embodying the landscape of East Cretan peak sanctuaries, as the only way that someone could reach to a peak sanctuary was (and is) on foot. This relationship can be traced both on Minoan iconography, and on a group of findings from the peak sanctuaries of East Crete, the clay models of human lower limbs.**

Figure 1: View from Petsophas hill. Photo by K. Glaraki.

Introduction

The district of Siteia consists of series of mountain ridges separated by small valleys and where the Early and Middle Bronze Age habitation areas are located. These mountains, the Thryphti or Siteia Mountains, can also give access to high upland plains suitable for summer pasturage (Fig. 1). Overlooking each valley is the highest peak of the enclosing mountain ridge.[1] On these mountains, Minoans chose to establish cult places, the peak sanctuaries. The cult of peak sanctuaries was a manifestation of popular religion,[2] at least during late Prepalatial and Protopalatial period.[3]

Since the 1950s and onwards, one of the main goal of the Minoan archaeological research has been the establishment of specific criteria, based on which a site could or couldn't be deemed a "peak sanctuary."[4] In the last few years, archaeologists have argued that the choice of a specific location for the establishment of a peak sactuary was stipulated by topographic factors, like visibility and inter-visibility.[5] Visibility has to do with the view which the peak commanded. This meant that in some cases the peak sanctuary was not placed on the summit of the relevant mountain, but on a lower peak, which gave better view of the surrounding countryside. Congruent with the view down, equally important seems to have been the view to the peak sanctuary from the settlement. Intervisibility is the visibility in between peak sanctuaries. It is likely that the high intervisibility of early Protopalatial peak sanctuaries in East Crete may have served to unite the settlements in religious practice, as is evidenced in the finds from the peak sanctuaries.[6]

Recent research indicates that a site's topography was the key determinant of a peak sanctuary.[7] All East Cretan peak sanctuaries lie within the boundaries of agricultural exploitation, either arable or pastoral. People

who established them had experienced the landscape, and the places within it were known entities. It appears that the Minoans chose particular mountain summits to establish a peak sanctuary. Elevation is less important than the necessity of an open, easily accessible area that could accommodate a large number of people.[8] The nearest settlement associated with a peak sanctuary is regularly oriented towards the steeper and most characteristic side of the hill or the mountain, on which the sanctuary is founded. Thereby, the settlement has achieved the highest degree of visibility to the most prominent and noticeable point of the sanctuary. Their proximity to areas of human activity and exploitation, visibility, and accessibility were factors to transform a place into a cult site that would have functioned as a landmark, a reference center of ritual.

A visit to an East Cretan peak sanctuary makes clear that the landscape is its most dominant feature.[9] This fact has been underlined by the relevant research and is a reasonable conclusion by taking into account that peak sanctuaries were open-air places during late Prepalatial and Protopalatial period.[10] By the term "landscape,"[11] we mean the cognitive or artificial delimitation of the space.[12] Space is the board of action, of existence and is perceivable on its dimensions based on countable features. Place is an area with definite or indefinite boundaries, a portion of space.[13] Space is a more abstract construct than place. It provides a situational context for places, but derives its meanings from particular places. Without places there can be no spaces and the former have primary ontological significance as centers of physical activity, human significance, and emotional attachment.[14] When landscape is perceived by the human senses all the elements that form it become part of the human memory. Furthermore, when the embodiment of the landscape[15] is performed by a wider group of people, then the landscape becomes part of the communal memory.[16] Thus, through this process each place emerges from a background that people already understand to a degree.

Peak Sanctuaries and Landscape: The Kinetic Experience

From the above mentioned it could be argued that landscape played an important role in choosing the location for a peak sanctuary. Tim Ingold argues that according to what he has called a 'dwelling perspective', the landscape is constituted as an enduring record of —and testimony to— the lives and works of past generations who have dwelt within it, and in so doing, have left something of themselves therein.[17] Landscape tells —or rather is— a story: "a chronicle of life and dwelling."[18] It enfolds the lives and times of predecessors who, over the generations, have moved around in it and played their part in its formation.[19] This formation is connected to the understanding of each place that constitutes the landscape. The understanding of each place is largely affected by the means we use to engage, and to embody it.[20] Moreover, there is a debate about the extent to which the physical abilities and practical habits subconsciously provide the necessary background of human actions.[21] As Tilley has pointed out, the "discovery" of the loci is accomplished through the human body.[22]

The ways to interact with the landscape of the peak sanctuaries are both through visual contact from a distance and through the visit to them. The relevant research, so far, has focused on the visual experience (e.g. visibility and intervisibility). Nevertheless, as the kinetic activities of human beings create apprehension of the landscape and create it as human,[23] it is almost certain that the walking must have played a decisive role in the embodiment of the places that we call "peak sanctuaries." The only way could someone reach to a peak sanctuary is on foot, and in most of the cases, after a trying climbing. *Kinesthesia*[24] is a useful term that helps someone to understand that beyond the allegedly superior senses of vision and hearing in a sedentary world, as our world is, the sense of movement and its attendants could be of high significance in a pedestrian world. As Rockefeller points out, movement

Figure 2: Path leading to Petsophas peak sanctuary. Photo by K. Glaraki.

patterns collectively make up locality and reproduce locality.[25] And this is the case for someone living in Bronze Age Crete. Thus, by walking, and daily interaction the sites were incorporated into the individual and collective memories and were emitted as cult places and landmarks. People who visited them, marked the limits with their steps, shaped paths (Fig. 2), and inhered into the landscape.

Minoan Iconography: Approaching a Peak Sanctuary

Walking is a common activity in Minoan cult practices, as iconography demonstrates. Regarding the iconography that is referring to the peak sanctuaries there are two examples that show men performing cult practices, both dated in Neopalatial period. The first comes from a fragmentary stone rhyton from Gypsades near Knossos. It features a tripartite building on a mountaintop, in front of which a man is bending to handle the contents of a basket. The rocky landscape and the steep slope on which the worshiper has climbed indicate the location.[26] This scene depicts the time after the climbing to a peak sanctuary and shows us a stage of the ritual that was taken place there. A second scene related to the peak sanctuaries is from another stone rhyton fragment from Knossos. The depiction on this fragment features two votaries carrying bowls in their outstretched hands in the foreground. In the background, there is an altar with attached masts or a series of walls forming a type of monumental entranceway to a shrine further uphill.[27] These two examples show that the procession towards a peak sanctuary, and walking in general, was an important stage of the ritual practices related to the peak sanctuaries.

Although these two Neopalatial iconographic examples are indicative of the crucial role that walking played at the cult practices related to the peak sanctuaries, a close look at the findings from the peak sanctuaries will shed some more light.

Models of Human Lower Limbs

The Data

There will not be an extensive reference to the findings from the East Cretan peak sanctuaries,[28] but I will limit myself to the presentation of those findings, which could be considered reflections of the experiencing the landscape on the ritual practices. I will therefore focus on the findings associated with representations of human lower limbs. These include clay models of leg (namely the thigh and the foot) and clay models of feet only. Clay models of legs have been located in the majority of the East Cretan peak sanctuaries[29] and they often have a suspension hole.[30] Clay models of feet have been discovered at Etiani Kephala,[31] Traostalos,[32] and Petsophas.[33] Into the group of the models of human lower limbs we can include some clay plaques, on whose upper surfaces are models of human pairs of feet. This kind of plaques has been found so far at Modi and Traostalos.[34] In some of the models in reference shoes are indicated.[35] Finally, in the same group we can include a clay plaque with an engraved imprint of human foot from Traostalos.[36] All these models are dated in Middle Minoan period and are small in size. Since the majority of East Cretan peak sanctuaries remain unpublished yet, it is not easy to present the exact numbers of them. Nevertheless, the preliminary excavation reports show that this group of findings was common in East Cretan peak sanctuaries.

Possible interpretations of the models of lower limbs

Petsophas was the first peak sanctuary that came to light in Crete. The excavation was conducted by Myres in 1903 and yielded models of human lower limbs, among other findings.[37] According to Myres, these models were offerings by the pilgrims given to the goddess in gratitude for healing.[38] This theory was in accordance with the long Greek tradition of offering anatomical votives to the healing god Asclepius and the modern votives (*tamata*)[39] of the Greek Orthodox churches. Nilsson seriously doubted this interpretation and without offering a cogent alternative explanation, stated that the clay anatomical models were offerings to the "Mistress of the Animals."[40] Alexiou shared Nilsson's view about the receiver of those offerings. He also noted that the anatomical votive symbolized the person who was dedicating it and that there was a practice of throwing these votives into a bonfire as a symbolic purification of the individual.[41] A few years before Alexiou, Marinatos connected the assignment of models of human lower limbs with invocations to treatment and the *iamata* (i.e. votives for healing) of the Asclepius temples. Marinatos argued that these models were so numerous because of the Minoans' lifestyle and that the gout was a common illness during the Minoan era.[42]

A kinetic interpretation of the human lower limbs

The interpretation that the clay models of human lower limbs functioned either as gratitude offerings due to a subsequent cure or as an indication of a diseased limb and an invocation for healing has the most supporters.[43] However, it is possible to address an alternative interpretation.

Today, as well as during the Bronze Age, the paths that lead to the peak sanctuaries are full of rocks, low vegetation and spiny-brooms. Thereby, walking to a peak sanctuary is a trying activity, and as a result, painful for someone's feet. A very characteristic example that shows the reaction of the peak sanctuaries' morphology on people's feet is the place name of the Petsophas peak sanctuary. Petsophas means "the one who eats the leather soles," indicating the type of terrain that one must have endured to reach the cult site.[44] Ingold has stated that modern boots deprived wearers of the possibility of thinking with their feet.[45] One must imagine that in the Bronze Age Crete people were not equipped with modern soled shoes, anatomically correct or hiking shoes to facilitate their gait. By acknowledging the greater difficulty to access the peak sanctuaries without proper footwear, one could assume that the above-mentioned offerings (clay models of

feet and legs) functioned as symbols of the pilgrims' effort and their embodied experience to reach to that cult place rather than votives for cure. As mentioned above, shoes are indicated in some clay models of lower limbs. Also, clay models of tiny shoes have been found at the peak sanctuary of Traostalos.[46] The shoe indication at the models of lower limbs and the shoe models of Traostalos endure the idea that these offerings were references to walking, as shoes would be important, necessary, and precious[47] for someone moving on the rocky terrain trying to reach to the peak sanctuary.[48] Through the dedication of these offerings, pilgrims were sending a message to the deity that in order to reach to the peak sanctuary, they either hurt their legs or they sacrificed a valuable possession (shoes) in her/his honour. Therefore, it is likely that pilgrims could have dedicated real shoes that have left no archaeological traces to the present.

Conclusions

The relationship between landscape, its embodiment from the people who visited the peak sanctuaries, and its reflection on the findings and the cult practices could be further studied. Nevertheless, the aim of this paper is to examine whether we can assume an embodied perception of peak sanctuaries' landscape in East Crete and if the archaeological record can verify this embodiment. Thus, I believe that something like this is possible. On the one hand, there is the strategic choice for the placement of peak sanctuaries, places integrated in the everyday life experience and the communal memory, but on the other hand there is a high quantity of models of human lower limbs —and in some occasions clay shoe models. These artifacts function as reflections of their dedicators' perception of the lived landscape and therefore as indices of a kinaesthetic process and transferors of this embodiment to their receiver, namely the deity.

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Endnotes:

1 Peatfield 1987, 274.
2 Peatfield 1990, 127; 1994, 23.
3 Peatfield 1987, 90; Nowicki 1994; Wright 1995.
4 Platon 1951, 96-160; Faure 1962, 1963, 1967, 1969, 1972; Rutkowski 1972, 152- 156; 1986, 73-75; 1988, 74-76.
5 Peatfiled 1987, 1990, 1994; Nowicki 1994; Morris and Peatfield 2002; Soetens et al. 2002, 2; Soetens et al. 2003, 485.
6 Soetens et al. 2006.
7 C.f. Rutkowski 1972, 152- 156; 1986, 73-75; 1988, 74-76; Peatfield 1983; 1987, 90; 1994, 22; 2009; Nowicki 1994, 34-39; Morris and Peatfield 2002, 107.
8 Peatfield 1983, 274-275; 1994, 23.
9 During the summer of 2012, I visited 14 East Cretan peak sanctuaries as part of my research for my MPhil dissertation. Visits were made at the peak sanctuaries of Thylakas, Prinias, Petsophas, Piskokephalo, Trachilos Phaneromenis, Modi, Kalamaki, Traostalos, Ksykephalo, Vigla, Etiani Kephala, Plagia, Korfi toy Mare, and Trachilas Ksirokampou.
10 Cf. Rutkowski 1988; Nowicki 1994, esp. 40- 41. During Neopalatial period buildings are erected at two East Cretan peak sanctuaries, Petsophas (Vavouranakis 2011b) and Traostalos (Chryssoulaki 2001).
11 According to *New Oxford American Dictionary* (NOAD) there are two main meanings for landscape: it can refer to the visible features of an area of land, or to an example of the genre of painting that depicts such an area of land.
12 *NOAD* determines space as a continuous area or expanse that is free, available, or unoccupied. For an alternative definition cf. Ingold 1993, 155.
13 For a thorough consideration of the terms landscape, place, space, and landscape archaeology in general cf. Vavouranakis 2011a, 14-17; 2012.
14 Tilley 1994, 15.
15 According to Low (2003, 10) embodied space is the location where human experience and consciousness take on material and spatial form.
16 In contrast see Bastien 1985 and Fernandez 1988, who regard landscape as a container of memory, morality and emotion and Massey 2006 who sees landscape as a provocation.
17 Ingold 2000, 189.
18 Adam 1998, 54.
19 Ingold 2000, 189.
20 According to Csordas (1994, 12) embodiment can be seen as an indeterminate methodological field defined by perceptual experience and mode of presence and engagement in the world.
21 Taylor 1993, 2000; Wrathall 2000.
22 Tilley 1994, 13; 2004, 10. Vice versa Brown (2000) discusses how the "performativity" of space, through its metaphorical properties, constrains and defines the body and personal identity.
23 Tilley 1994, 13.
24 Coined based on ancient Greek κινέω (I put in motion) + αίσθησις (sensation) and means the sensation or perception of movement/ the perception of the position and posture of the body.
25 Rockefeller 2001.
26 Alexiou 1963, pl. IST; Shaw 1978, 440-441, fig. 10; Marinatos 1993, 121, fig. 87.
27 Evans 1928, fig. 486; Shaw 1978, 440 n. 21; Marinatos 1993, 121.
28 The most common finds from peak sanctuaries are human figurines, models of human limbs, animal figurines, pebbles and pottery. See Watrous 1995.
29 Petsophas: Myres 1902/1903, 347-375; Rutkowski 1991, 91- 102, pls. 45- 46; Thylakas: Reinach 1913, 278- 300; Maza: Platon 1951, 109- 110, pl. E: 2, 9; Traostalos and Etiani Kephala: Davaras 1980, pl. II left; Chryssoulaki 2001, 62 – 63; Prinias: Davaras 1983, fig. 42; Trachillos Phaneromenis: Nowicki 2012, 150.
30 For the examples from Petsophas see Rutkowski 1991, 32 and 34, who states that the suspension hole was for hanging the votive limbs in a sacred image or idol, obviously influenced by the modern practice of suspending offerings in Greek Orthodox churches. Nevertheless, there is not a single example of the presence of sacred images in the Minoan Crete. For the discussion on the presence of Minoan sacred idols see Watrous (1996, 39) who mentions the finding of a part neck, shoulder and head that belonged to a figurine, whose total height is estimated at 3 m. See also Cromarty 2008, 57.
31 Davaras 1980, pl. II, down left corner.
32 Chryssoulaki 2001, 62.
33 Davaras 1980, pl. II down right.
34 A clay model that represents a foot encased in a ponted boot with slightly up-turned toes was found at the Neopalatial Syme Sanctuary in Crete (Muhly 2012).
35 Davaras 1980, pl. I; Rutkowski 1991, pl. 45:9
36 Davaras 1980.
37 Myres 1902/1903.
38 Myres 1902/1903, 381.
39 *Tamata* are a form of votive offering or ex-voto used in the Eastern Orthodox Churches, particularly the Greek Orthodox Church. Tamata are usually small metal plaques, which may be of base or precious metal, usually with an embossed image symbolizing the subject of prayer for which the plaque is offered. Tamata may be offered to an icon or shrine of a saint as a reminder of a petitioner's particular need, or in gratitude for a prayer answered.
40 Nilsson 1950, 74- 75.
41 Alexiou 1964, 89-90.
42 Marinatos 1959, 30. In East Crete, clay models of feet seem to have been more numerous than hands. This predominance of feet over hands corresponds to later Greco-Roman votives —where indeed there is a predominance of the offered limbs (Lang 1977, figs. 14, 25; Arnott 1999, 5). From a medical point of view Potter (1989, 97-98) has proposed that feet are more

vital than the hands, because injuries on the former affect the sufferer much more and healing is more difficult.
43 Ghiannoulidou 1979, 39- 40; Van Straten 1981, 146; Verbruggen 1981, 115-117; Warren 1988, 27; Peatfield 1990, 120- 122; 1992, 73- 74; 1995, 220; Sakellarakis 1994, 197; 1996, 84- 85; Arnott 1999, 5; Chryssoulaki 1999, 314- 316; Georgoulaki 2006, 388; Morris 2009, 179; Davaras 2010, 76.
44 Spanakis 1964, 435.
45 Ingold 2011, 39.
46 Chryssoulaki 2001, 62
47 Black high-boots are part of the Cretan men's traditional costume. Even today, Cretan shepherds of the old school, who spent their time on the mountains, wear black high-boots on ordinary occasions (Rackham and Moody 1996, 154).
48 Muhly (2012, esp. 137) referring to a clay model of a foot encased in a pointed boot that was found at the Syme Sanctuary states that "the Syme model would have also served as a commemoration of a pilgrim's arduous journey through the mountains to participate to the rituals carried out at remote Syme and perhaps also as a request for protection to ensure his eventual return to the sanctuary."

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Textile Analysis in Northern Finland

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Introduction and Background

This project centers on a number of burials beneath the floors of churches in Northern Finland, dating between the 17th and 19th centuries. The burials originate from churches in Oulu, Haukipudas and Keminmaa, and exhibit excellent preservation due to cold temperatures and dry, well-ventilated air. As a result, many of these burials are mummified, and the associated textile remains are in excellent condition. While these assemblages include both adult and sub-adult burials, this project specifically addresses the sub-adult individuals within the sample. In addition to the standing churches, the rediscovery of previously unanalyzed material recovered from Hailuoto Church through salvage excavations during the 1980s offers an additional data set in a unique context for comparison. The church was destroyed by fire in 1968 and the artifacts excavated from Hailuoto Church represent a unique set of preservation and conservation requirements and challenges in contrast with the intact burials from Oulu, Haukipudas, and Keminmaa. As a result of the rediscovery of the Hailuoto collection, work this summer included recataloguing the collection and associated records, in addition to continued textile analysis on the excavated remains and samples for all churches.

Although the mummified remains in the standing churches exhibited excellent preservation at the time of sample collection, a number of recent concerns have been raised regarding changes in the microclimate beneath the church floors. This includes the impact of modern renovations and generally increasing temperatures, with an accompanying increase in mold, mildew, and animal activity. Exploring preservation options has been the focus of a multi-year study, conducted in conjunction with the individual churches. Sanna Lipkin (PhD, University of Oulu, Finland) works with the textiles and textile evidence associated with this project, and directed this research project. Dr. Lipkin's skills in existing methods of textile analysis, in addition to her focus on developing new theoretical approaches, made her an invaluable resource.

Research questions addressed concepts of identity, particularly the cultural construction of children, childhood and gender in the context of the relatively high child mortality rate during this period. As part of this analysis, the project explored several hypotheses concerning the practice and performance of mourning within pre-modern northern Finnish culture in the Pre-Modern Era.

Theoretical Approaches

Identity theory, with an emphasis on children and childhood theory, represents a key theoretical approach throughout this project. Children represent an often invisible facet of culture, whose record is often ignored in archaeological research.[1] It is important to recognize that the concept of childhood is culturally constructed. By exploring conceptions of children, childrearing and the process of acculturation and socialization, it is possible to explore the cultural construction of childhood within this context.[2] Additionally, children provide an interesting cross-section of other aspects of culturally constructed identity – including gender, family status, rank, religion and ethnicity – which can in turn contribute to a deeper understanding of these concepts on a broader scale. Due to the mummified state of the burials at the standing churches, it is in often possible to make a sex determination on children and infants, something which is

impossible with purely skeletal remains. This offers the unique opportunity to discuss aspects of child-specific theoretical approaches, including cultural conceptions at the intersection of age and gender.[3] The number of child and infant burials present in this sample makes it an ideal way to explore the cultural construction of childhood, the intersectional aspects of age and other aspects of identity, in addition to familial approaches to coping with the high infant mortality rate and loss of children.

While many studies have addressed childhood in mortuary contexts – one of the places where children are arguably easiest to "see," this approach goes beyond the mere discussion of the burials to the intersectional aspects of children and childhood identity as represented by these remains.[4] By exploring the dividing line between "children" and "adults," this project brings greater depth and understanding to current conceptions on the cultural construction of childhood, recognizing children as agents capable of both using and manipulating cultural conventions for their own purposes. Additionally, this project explores the impact that children – and the loss of a child – has on community constructions and conceptions of children and childhood on a broader scale.

Available Material

During this period, a combination of poor sanitary and nutritional conditions resulted in child mortality rates of forty percent by the age of four, with higher levels during epidemics. In examining the physical remains of these children, their mummified condition allows for sexing their remains, which enables the theoretical approaches mentioned above. In addition to the physical remains, coffin markings and a number of church records are also available to assist with individual identification.

One of the unique aspects of these burials is the lack of every-day clothing worn by the deceased. Instead, they are covered by half-robes, which are then pinned to the coffin lining to create the illusion of fashionable clothing. These garments were roughly sewn and pinned together, and were specifically crafted for the funeral from repurposed textiles. Evidence from Haukipudas indicates that the style of the robe differed for girls and boys, with the bodice of girl's robes resembling adult female attire and boys' robes including a frill or lace collar consistent with adult male attire.

In addition to these half-robes, which occur in both adult and sub-adult burials, children's burials are accompanied by a variety of silk flowers held in the hands and formed into crowns. These appear in burials of children as old as ten, but not in adult contexts. There are also indications of sexual differentiation in the placement of these crowns and wreathes, with girls having additional flower décor. Written sources suggest that the girls' burial often represented them as brides regardless of their ages.

Other clothing articles which appear in these burials range from caps and hats to gloves and stockings. In the case of children, the caps used in the burial represent regional differences. Those at Haukipudas showing little or no gender differentiation and were created from scraps of cloth specifically for inclusion in the burial, in contrast with those present at Hailuoto, which represent items actually worn by the child during their lifetime, and differed based on the child's gender.

Methodological approaches

As part of taking samples at Haukipudas, Keminmaa, and Oulu, a portable Dinolite microscope camera was used to create images for samples where textiles

themselves are unavailable, or too fragile for regular handling. Samples were taken from both the warp and weft of textiles in these burials, before reinternment. In the case of textiles from Hailuoto, both the Dinolite and stereoscopic microscopes were utilized in the lab to explore and document previously excavated textile items. This process served to record and organize relevant data to create a record of the textile material available. Data collected from these images and materials included the warp and weft threads per inch, individual warp and weft thread width, weave patterns, and overall preservation quality. Microscopic analysis was then used to analyze fiber type (wool, cotton, silk, bast or other, Figs. 1-4), and to assess preservation quality on the fiber-level. This allows for discussion of material, quality and occasionally local versus nonlocal varieties.

In addition to the more standard approaches to textile analysis, CT scanning has been utilized for non-destructive analysis of coffin construction, human remains and textile presence. Due to their small size, child and infant burials were ideal for scanning purposes. Several of the sub-adult coffins were taken in for CT scans prior to reinternment. This offers new non-destructive approaches to textile analysis, in many cases without opening the coffin itself. This non-destructive approach opens up a wide variety of new forms of minimally-invasive textile analysis for future use.

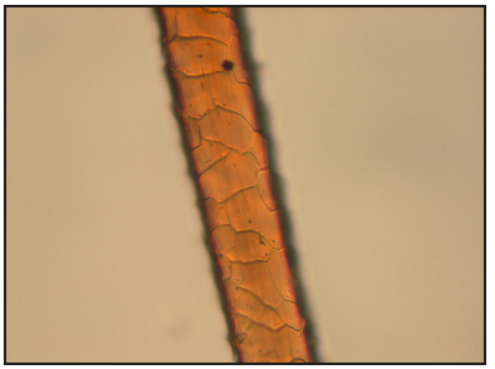

Figure 1: Wool, as viewed under compound microscope. Sample taken from Haukipudas site. Photo by E. Ruhl.

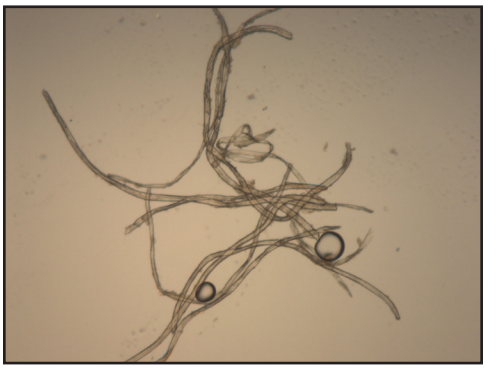

Figure 2: Cotton, as viewed under compound microscope. Sample taken from Haukipudas site. Photo by E. Ruhl.

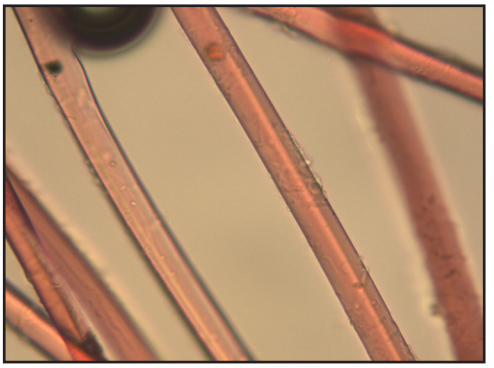

Figure 3: Silk, as viewed under compound microscope. Sample taken from Haukipudas site. Photo by E. Ruhl.

Figure 4: Bast, as viewed under compound microscope. Sample taken from Haukipudas site. Photo by E. Ruhl.

Conclusion and Outcomes

The information gained through the use of these theoretical and methodological approaches contributes to a data set addressing the ongoing discussion of conceptions of children and childhood, the visibility of children in the archaeological record, the intersection of childhood and other aspects of identity, and children as social actors in their own right. In the context of this project, work completed during the 2015 field season enables a closer examination of the cultural construction, socialization and enculturation of children and childhood during this period in northern Finland.

The 2015 summer field season resulted in a co-authored paper presented at the 2016 Society for Historical Archaeology Conference in Washington DC (Jan 6-9 2016). Titled "Mourning for Children in northern Finland – Funerary attire in the 17th-18th century contexts," the paper utilized textile analysis completed over the 2015 summer field season in context with historical documents, records and practices to explore mourning for children in a time with high child mortality rates. While tangentially related to the theoretical approach, this project has added significance for its potential to assist local churches in implementing plans to ensure the continued preservation of these burials. In addition to these short-term research goals, this summer's field season also contributed to the ongoing data collection which will form the basis of both my advanced exams and doctoral dissertation.

*Acknowledgments:

Many thanks to IEMA, the University at Buffalo, the University of Oulu, and the interdisciplinary Mummy Project. This project would not have been possible without the continued without the ongoing help, guidance and support of Dr. Sanna Lipkin.

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4 Baxter 2005

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An Ottoman Cemetery in Romania: Report of Research Conducted with the IEMA Research and Travel Scholarship

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Introduction

In May of 2015, with the support of the Research and Travel Scholarship from the University at Buffalo's Institute for European and Mediterranean Archaeology (IEMA), data was collected from an archaeological collection in Timişoara, Romania. This report details the activities funded by this grant, discusses some preliminary results, and details future research and analyses.

Located on the western coast of Romania, Timişoara is a city with a diverse background, sharing much of its history with the adjacent Hungarian lands. In the 16th century, the Ottoman Empire's expansion into southeastern and central Europe resulted in the takeover and transformation of many cities, including Timişoara as well as Belgrade, Buda, and other geopolitically important places.[1] These cities soon became important Ottoman defense centers heavily invested in by the new leadership. Transformed into the Pashalik of Temesvár, this fortress city located on the eastern edge of the European Ottoman lands became an important part of a ring of defense fortifications, and would remain so for more than a century and a half.

In 2006 and again from 2013 to 2014, a large number of human skeletal remains threatened by construction were excavated by the Banat Museum of Timişoara (Muzeul Banatului Timişoara), brought up from two sections of a historic cemetery under the city streets.[2] These individuals, found next to the remnants of a mosque, were members of the Ottoman Muslim community that was settled in Timişoara in the 16th and 17th centuries. A bioarchaeological investigation of these remains is allowing for the study of a dynamic period in this city's history. The 2015 data trip supported by the IEMA Research and Travel Scholarship had three foci: the collection of craniometric measurements, the recording of preliminary pathological data, and the procurement of samples for a strontium isotope analysis.

Collection of Craniometric Data

Biodistance, or the analysis of metric and non-metric variation expressed in human skeletal material, is a non-destructive method that allows researchers to study questions of identity and group affinity. The use of these data are based on the understanding that groups of people who are more closely related will share more biological attributes,[3] allowing for analyses of certain traits expressed skeletally to be proxies for genetic data. Metric traits are measurable characteristics of the human skeleton driven by neutral evolution and predominately indicative of population history.[4] Measurements taken from the human skull are the most useful and common metrics taken in biodistance analyses since post-cranial elements are more susceptible to remodeling and functional modification[5] and thus less informative on biological relatedness. This established methodology is being utilized to explore questions of identity in the Timişoara skeletal series.

Using standard craniometric measurements based on Howells' measurements, a commonly used reference standard,[6] thirty-eight measurements were obtained from 28 adult crania in the Timişoara skeletal series (Fig. 1; Table 1). This craniometric data set is currently being analyzed in collaboration with Dr. Noreen von Cramon-Taubadel, Director of the Buffalo Human Evolutionary Morphology Lab.

Figure 1: An example of a craniometric measurement taken on a skull in the Timişoara skeletal series. Photo by K. G. Allen.

Table 1: Measurements obtained for biodistance analysis

ABBREVIATION	NAME	ABBREVIATION	NAME
GOL	Glabello-Occipital Length	MDH	Mastoid Height
NOL	Nasio-Occipital Length	MDB	Mastoid Width
BNL	Basion-Nasion Length	ZMB	Bimaxillary Breadth
BBH	Basion-Bregma Height	SSS	Zygomaxillary Subtense
XCB	Maximum Cranial Breadth	FMB	Bifrontal Breadth
XFB	Maximum Frontal Breadth	NAS	Nasio-frontal Subtense
STB	Bistephanic Breadth	EKB	Biorbital Breadth
ZYB	Bizygomatic Breadth	DKB	Interorbital Breadth
AUB	Biauricular Breadth	WNB	Simotic Chord
WCB	Minimum Cranial Breadth	IML	Malar Length Inferior
ASB	Biasterionic Breadth	XML	Malar Length Maximum
BPL	Basion-Prosthion Length	WMH	Cheek Height
NPH	Nasion-Prosthion Height	FOL	Foramen Magnum Length
NLH	Nasal Height	FRC	Nasion-Bregma Chord
OBH	Orbit Height Left	FRS	Nasion-Bregma Subtense
OBB	Orbit Breadth Left	PAC	Bregma-Lambda Chord
JUB	Bijugal Breadth	PAS	Bregma-Lambda Subtense
NLB	Nasal Breadth	OCC	Lambda-Opisthion Chord
MAB	Palate Breadth	OCS	Lambda-Opisthion Subtense

Figure 2: Head trauma on a probable male skull in the Timişoara skeletal series. Photo by K. G. Allen.

Preliminary Pathology Investigation

In addition to the collection of craniometric measurements for the purpose of a biodistance analysis, preliminary pathological data was collected during this trip. While obtaining measurements, pathological assaults on the crania were recorded and photographed. The most common forms of pathology in this preliminary investigation included traumatic injury to the head (Fig. 2), enamel hypoplasias in the dentition (Fig. 3) and porotic hyperostosis/cribra orbitalia manifestations (Fig. 4).

Trauma was not an unexpected pathology in this skeletal series, as many of these individuals were probably active members of the Ottoman military forces stationed in Timişoara. Historical accounts tell us that following the initial takeover of the city, Timişoara and the greater region remained an arena for battle and warfare for most of the occupation period.[7] In this context, interpersonal conflict resulting in permanent injuries on skeletal elements would likely not have been uncommon. In the 32 crania that were examined, six possible traumatic injuries to the cranial vaults of adult individuals were noted. Four individuals had healed blunt force traumas on the right side of their frontal bones. Additionally, two possible sharp force traumas on two separate crania were noted, one also located on the right side of the frontal bone in a similar position as the healed blunt forces injuries, and one on the side of the head, located on the left parietal bone. This last trauma was unique not only in location, but also in the fact that it was the only one of these five manifestations that occurred on a female skull.

Figure 3: Linear enamel hypoplasias on the upper left canine of a probable female in the Timişoara skeletal series. Photo by K. G. Allen.

Figure 4: Porotic hyperostosis on a fragment of the occipital bone of a juvenile from the Timişoara skeletal series. Photo by K.G. Allen.

Enamel hypoplasias, or deficiencies in the enamel thickness on the surface of tooth crowns, are non-specific stress indicators. The presence of these pathological markers on teeth is a permanent record of a time of severe biological stress in an individual's life. Hypoplasias only develop when the enamel of a tooth is forming, and therefore record stress events during development. These pathological markers have been correlated with a large number of sources of systemic stress, with disease and poor nutrition the main causes.[8] The most common manifestation of enamel hypoplasias are linear furrows, but pit defects and broad planes also occur.[9] In a pilot study of 17 individuals, enamel hypoplasias (predominately in the linear form) were found on 16 individuals, 14 of which had defects in two or more non-adjacent teeth indicative of systemic-stress, as opposed to a focalized trauma. While records of high stress might be presumed for males involved in warfare activities, these 16 individuals included eight adult males, five adult females, two juveniles and one adult of ambiguous sex; clearly systemic stress was not solely reserved for the male population.

Porotic hyperostosis (PH) and a variant of it, cribra orbitalia (CO), are much like enamel hypoplasias, as a skeletal manifestation of either is indicative of non-specific extreme or enduring stress. Lesions representing a thinning or complete destruction of the outer table of the cranial vault (PH) or the orbital roofs (CO) can be the result of a number of stressors, including inflammatory or hemorrhagic processes, tumors, different types of anemia, dietary disorders such as scurvy or rickets, or parasitic infections.[10] While neither enamel hypoplasias nor PH and CO can confidently be attributed to one specific cause, their presence represents a general state of poor-health and stress. In 32 skulls inspected, five cases of mild to moderate porotic hyperostosis was noted on the parietals and/or occipital bones; cribra orbitalia was noted in two individuals, mild in expression. Like enamel hypoplasias, records of PO and CO in this small sample indicate stress in diverse demographic groups, these seven individuals including two adult females, three adult males and two juveniles.

In addition to head trauma, enamel hypoplasias, and porotic hyperostosis/ cribra orbitalia, a number of other pathological assaults were noticed. While most of this data collection was focused solely on crania, some post-cranial defects were noted, including healed lesions on visceral ribs indicative of respiratory infection, post-cranial traumatic injuries, and osteoarthritis or osteophytosis of the vertebrae. Additionally, severe dental pathologies including abscesses, carious lesions, severe occlusal wear, crown staining, pipe facets and endentulism were prominent. Much work is still required to make broad conclusions, but initial investigations indicate a number of stress and health-related problems suffered by the Ottoman community in Timişoara.

Sample Collection for Stable Isotope Analysis

The third focus of this research trip was to procure samples intended for an analysis of stable isotopes. As stable isotopes of strontium have proven useful in questions of mobility, movement, and identity,[11] this project will utilize strontium isotope analysis to better understand the makeup of the Ottoman skeletal collection in Timişoara. Because dental enamel has proven the most resilient human tissue for preserving isotopic ratios,[12] teeth were collected for 21 individuals with suitable dentition and exported with permission from the relevant authorities. Additionally, 21 archaeological faunal dental samples from three species-*Sus domesticus* (domesticated pig), *Ovis aries* (sheep), and *Canis familiaris* (domesticated dog) were exported, to be utilized in establishing a local signature. The sample sizes for both the human and faunal specimens were dictated by the availability of appropriate samples. Strontium isotope analysis is currently planned for the fall of 2016. The samples collected from Timişoara will be tested at the Geochronology and Isotope Geochemistry Laboratory at the University of North Carolina at Chapel Hill.

Future Research Planned

This data collection trip funded by IEMA is the start of a much larger project. A number of future activities are planned with most of the analyses of the current data still underway and plans to expand the data set in progress. Expansion of the craniometrics portion of this research to include similar data sets from additional Ottoman skeletal series in Southeastern Europe is planned for the spring and summer of 2016. This will provide the opportunity for regional analyses of group composition and biological relatedness of Ottoman populations throughout the European territory. To complement biodistance analyses utilizing craniometric measurements, non-metric cranial traits will be recorded for all skeletal series. At this time, biodistance analyses will take precedence over pathology research but it is hoped that in the near future a return to questions of disease and health amongst the Ottoman garrison populations will be feasible.

Concluding Remarks

This report summarizes the data collection trip funded by the Research and Travel Scholarship from the University at Buffalo's Institute for European and Mediterranean Archaeology (IEMA). The data collected will be utilized as a part of a larger, more encompassing project. The ultimate focus at this time is on questions of identity and group composition in Ottoman communities established in southeastern Europe during Ottoman expansion. The Ottoman period has consistently been an understudied time period in archaeology, multi-period excavations even discarding or poorly recording Ottoman layers in pursuit of more 'valuable' time periods.[13] The modernity of this time period, however, and its known connections with national policies and political events in former Ottoman occupation areas makes it an extremely important period to understand. The bioarchaeological record offers the possibility to supplement the historical and traditional archaeological records, utilizing human skeletal remains to highlight an important time period in the recent past. In many areas of southeastern Europe, including western Romania, the replacement of the Ottoman regime with subsequent reigns (in the case of Timişoara, the Habsburgs of Austria) resulted in the destruction of the physical evidence of the Ottoman period. The uncovering of this recent archaeological cemetery in Timişoara, Romania is allowing for the exploration of a forgotten era in this city's history utilizing a new data source: human biological material. Additionally, this cemetery has inspired

a larger regional analysis of European Ottoman communities investigated through the bioarchaeological record.

*Acknowledgments: a special thank you to the Institute for European and Mediterranean Archaeology for providing the funds for this research, as well as to Muzeul Banatului Timişoara and Dr. Florin Draşovean, without whom this research would not have been possible.

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5 Tyrrell 2000; Ruff et al. 2006
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7 Ágoston 2002
8 Mays 2010; Goodman and Rose 1990
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Interview with Dr. Attila Gyucha, 2015-2016 IEMA Postdoctoral Fellow

Ashlee Hart

Dr. Attila Gyucha is currently the Postdoctoral Fellow at the Institute for European and Mediterranean Archaeology at the University at Buffalo, SUNY. He received a Master of Arts in Archaeology in 1996 from József Attila University in Szeged. He earned a Doctorate in Archaeology in 2010 from Eötvös Loránd University in Budapest, completing a dissertation entitled, "The Early Copper Age in the Körös Region." He currently works on international projects in both Greece and Hungary and has been one of the directors of the Körös Regional Archaeological Project since 1998.

Dr. Gyucha, what are your current research interests and which projects are you currently working on?

At the moment, I am involved in several international projects in Hungary and in Greece. These projects focus on the Neolithic of southeastern Europe, but diverge from there. In Greece, I'm involved in an American-Greek project at the famous Alepotrypa Cave site and its surroundings to understand the aggregation processes that occurred during the Final Neolithic. In Hungary, since 1998 I have directed the Körös Regional Archaeological Project (affectionately known as KRAP) with my friend and colleague William Parkinson (The Field Museum) investigating cultural and socio-economic changes in various periods of prehistory. Our study area, the Körös region in southeastern Hungary has a uniquely detailed archaeological record based on intensive surface collections. The surveys, which started in the 1960s, have covered more than 1,550 square miles and mapped ca. 15,000 settlements and cemeteries from the Neolithic to the 17th century AD. This truly incredible dataset makes the region an ideal laboratory for studying social, economic, and cultural transformations in Europe. In the first decade of the 2000s we focused our research on one of the greatest unsolved questions of European prehistory: why flourishing tell sites were abandoned without exception around 4,500 BC. The second phase of our research program steps further back in time to see the other side of the same coin. Our major goal is to model the processes that brought about the first large agricultural settlements in Europe during the 7th and 6th millennia BC. As opposed to site-specific research that has dominated prehistoric archaeology in the broader region, our project is exceptional for its regional perspective. In addition to KRAP, in the past 15 years I have supervised and mentored a number of masters and doctoral dissertation projects, and have assisted former American KRAPers to begin their own long-term research projects in the Körös region with other Hungarian colleagues.

Your work as the IEMA post-doc centers on the prehistoric development of urbanism in the ancient world. How did you get interested in the subject?

Neolithic tells in Southeastern Europe and the Near East, occupied by hundreds or thousands of individuals have been labeled many times as proto-urban or urban settlements. Recent technological developments in prehistoric archaeological research, improvements in remote sensing techniques in particular, have resulted in a wealth of new data regarding these demographic and economic centers. In addition to detailed pictures of the extent and spatial arrangement of tell sites, investigations of areas around tells also frequently have produced surprising data, which shed light on remarkably sophisticated settlement organizations indicating a considerable degree of social and economic complexity. Furthermore, the recent introduction of regional, diachronic studies helps us place these sites in broader geographical and temporal contexts. These advances provide an unprecedented opportunity to study the socio-economic processes and mechanisms behind prehistoric population aggregation. However, to gain a more complete understanding of the emergence, development, and collapse of these societies we need to use a broader, cross-cultural perspective that considers a wide range of theoretical and methodological approaches to ancient and modern urban societies. It's fantastic that I have been given the opportunity to devote nearly a whole year at UB to develop this idea, to organize the ninth annual IEMA conference on population aggregation and early urbanization, and to instruct a seminar on the same topic.

Who has proven to be the most inspiring to your own work?

Other than my older brother, who took advantage of my early interest to archaeology by making me shovel our garden every spring from the age of about 7 in the hope of finding "treasures," the work of Ferenc Móra, a fabulous Hungarian archaeologist who wrote a book entitled *A Travel in Underground Hungary* also had a major influence on me. Later, Stuart Piggott's, V. Gordon Childe's, and Colin Renfrew's books solidified my decision to become an archaeologist. Since my college years I have been very fortunate to be able to learn from and work with several of the "giants" of Hungarian archaeology; one of them, Pál Raczky, will attend the IEMA conference this year. The most critical turning point in my career, however, occurred on a spring day in 1998, when after a usual, long fieldwork day, I found a random American waiting for me at the Munkácsy Mihály Museum in Békéscsaba, Hungary. Being the only prehistoric archaeologist who spoke some broken English, I ended up having to talk with him. It was Bill Parkinson. The success of our first, overnight meeting turned into a fruitful collaboration – the Körös Regional Archaeological Project. The first two years of fieldwork was a sometimes challenging adjustment process to merge Hungarian and American methodological approaches. During these years, I gradually became familiar with the anthropological perspective, which was completely missing from Hungarian archaeology until very recently. Therefore, I believe that this genuinely organic trajectory has contributed the most to my professional work. In addition, during the field seasons of KRAP, I have had the chance to teach and instruct many American and Hungarian students, and through this project I became involved in an international circle of archaeologists. To work in this extensive, worldwide network of excellent professionals is a huge challenge, but this inspires me the most.

What have been the most rewarding, and most challenging aspects of your time as the IEMA post-doc?

What I find most rewarding is to work every day with the faculty members, which have an exceptional reputation, especially for Old World archaeology. Everyone has gone above and beyond to involve me in activities in and out of the department, and to genuinely make me feel like a part of the department. The administrative staff is also extremely great and helpful. Teaching is another thing that I really like, however, it is more important that my students enjoy the classes and benefit from the seminar. Also, previous IEMA post-docs did an excellent job and left me with big shoes to fill. Their diligent notes and shared experiences make my life far easier, and my work related to the IEMA conference organization much more efficient. However, the most challenging aspect is definitely that a day consists of only 24 hours in Buffalo too; it is a constant, unwinnable war to make the most out of each short day.

What advise would you give current graduate students working on their dissertation?

That is quite simple. I mean, quite simple to say, but not so easy to do. So, firstly, stay focused. Secondly, no, really, stay focused. Create a thoughtful and detailed research design and don't let new ideas that look bright and fanciful at first sight distract you from your original plan. Chase these ideas after you finish. Thirdly, learn that even though it is very important, the dissertation is just one step in your career and not the 'be-all, end-all.' And finally, there is a phrase I have heard from my great colleague, Rick Yerkes, 'there are two different types of dissertations, the excellent ones, and the ones that never happened.'

University at Buffalo The State University of New York
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IEMA
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THE NINTH IEMA VISITING SCHOLAR CONFERENCE

2-3 APRIL 2016

NORTH CAMPUS, GREINER HALL
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BUFFALO, NY 14261

COMING TOGETHER:

COMPARATIVE APPROACHES TO POPULATION AGGREGATION AND EARLY URBANIZATION

MODIFIED IMAGE OF A MURAL PAINTED BY MONICA WICKELER IN TORONTO

ORGANIZER: ATTILA GYUCHA

The current, fast-growing tendency of people moving from small settlements to cities has resulted in increased scholarly interest into the origins and different aspects of population nucleation. Coalescence has been a global phenomenon for human societies during the past several millennia, and the long-term perspective of archaeological research has a great potential to provide insights into how urban environments formed and their implications for humanity.

Through the reorganization of smaller scale social units into more complex configurations, early centers of economic and political organizations occurred throughout the world at various times and places, and in fundamentally different socio-political contexts. Their architectural and functional characteristics varied extensively, and their evolutionary trajectories took dramatically diverse courses. Nevertheless, one common feature of these nucleated settlements was that they offered a variety of opportunities to their residents that overrode the multitude of challenges of living in close quarters.

This symposium will focus on the origins of and variations in prehistoric population nucleation and ancient urbanization in a cross-cultural framework. An international group of anthropologists, prehistorians, and Classical archaeologists will explore the integrative mechanisms that brought large populations together, the social practices and institutions that fostered the maintenance of aggregated settlements, as well as the impacts of aggregation on socio-cultural developments in Europe, the Near East, and the New World.

KEYNOTE SPEAKER

Michael E. Smith Arizona State University

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REGISTRATION INFO

All are welcome to attend the conference.
Please register through: **www.iema.buffalo.edu/conference**

For more information contact Dr. Attila Gyucha (attilagy@buffalo.edu)

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